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Scientific and Technical Information Center

SEARCH REQUEST FORM

Rush
M. Hale
7/17/06

Requester's Full Name: Qazi Examiner #: 74141 Date: 7/17/06
Art Unit: 1616 Phone Number: 2-0622 Serial Number: 101630282
Location (Bldg/Room#): 4A45 (Mailbox #): 9670 Results Format Preferred (circle): PAPER DISK

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: See attached

Inventors (please provide full names): See attached

Earliest Priority Date: _____

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Noble -

This search was either lost/misplaced.

Please search ASAP as a RUSH!
E

Thanks,
Mary

M. Hale
57/117106
7/18/06
20 Prep STN
SSCP
6 STR

=> b reg

FILE 'REGISTRY' ENTERED AT 14:00:22 ON 18 JUL 2006
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
 provided by InfoChem.

STRUCTURE FILE UPDATES: 17 JUL 2006 HIGHEST RN 893880-40-5
 DICTIONARY FILE UPDATES: 17 JUL 2006 HIGHEST RN 893880-40-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

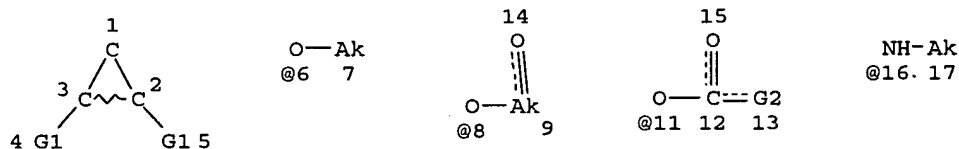
Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
 predicted properties as well as tags indicating availability of
 experimental property data in the original document. For information
 on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> d que sta 13

L1 (471233)SEA FILE=REGISTRY ABB=ON PLU=ON C3/ESS
 L2 STR



Ak-N-Ak O-S-G3
 18 @19 20 @21 22 23

VAR G1=6/8/11/21/X

VAR G2=6/NH2/16/19

VAR G3=AK/CY

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 7

CONNECT IS M2 RC AT 9

CONNECT IS X4 RC AT 22

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

L3 2427 SEA FILE=REGISTRY SUB=L1 SSS FUL L2

100.0% PROCESSED 105321 ITERATIONS

2427 ANSWERS

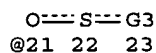
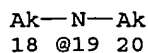
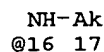
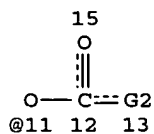
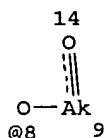
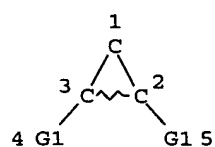
SEARCH TIME: 00.00.01

=> d que sta 119

L1 (471233)SEA FILE=REGISTRY ABB=ON PLU=ON C3/ESS

L2

STR



VAR G1=6/8/11/21/X

VAR G2=6/NH2/16/19

VAR G3=AK/CY

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 7

CONNECT IS M2 RC AT 9

CONNECT IS X4 RC AT 22

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

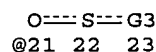
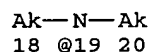
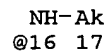
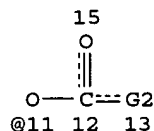
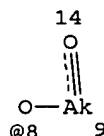
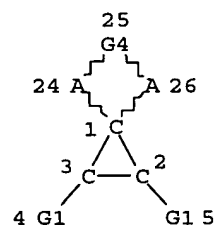
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

L3 2427 SEA FILE=REGISTRY SUB=L1 SSS FUL L2

L14 STR



VAR G1=6/8/11/21/X

VAR G2=6/NH2/16/19

VAR G3=AK/CY

REP G4=(2-15) A

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 7

CONNECT IS M2 RC AT 9

CONNECT IS X4 RC AT 22

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 25

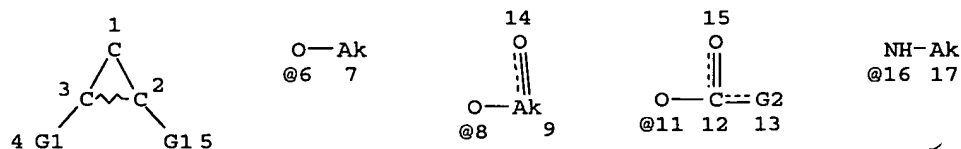
STEREO ATTRIBUTES: NONE

L16 58 SEA FILE=REGISTRY SUB=L3 SSS FUL L14

L19 0 SEA FILE=REGISTRY ABB=ON PLU=ON L16 AND I/ELS

=> d que sta 121

L1 (471233)SEA FILE=REGISTRY ABB=ON PLU=ON C3/ESS
L2 STR



Ak—N—Ak O—S—G3
18 @19 20 @21 22 23

VAR G1=6/8/11/21/X

VAR G2=6/NH2/16/19

VAR G3=AK/CY

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 7

CONNECT IS M2 RC AT 9

CONNECT IS X4 RC AT 22

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

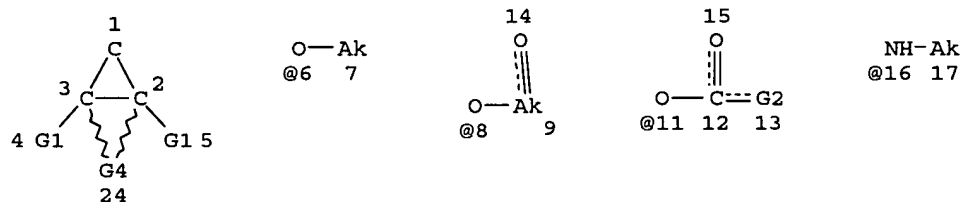
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

L3 2427 SEA FILE=REGISTRY SUB=L1 SSS FUL L2

L17 STR



Ak—N—Ak O—S—G3
18 @19 20 @21 22 23

VAR G1=6/8/11/21/X

VAR G2=6/NH2/16/19

VAR G3=AK/CY

REP G4= (3-16) A

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 7

CONNECT IS M2 RC AT 9

CONNECT IS X4 RC AT 22

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 23

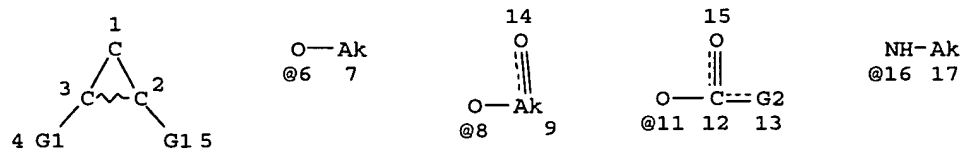
STEREO ATTRIBUTES: NONE

L20 396 SEA FILE=REGISTRY SUB=L3 SSS FUL L17

L21 6 SEA FILE=REGISTRY ABB=ON PLU=ON L20 AND I/ELS

=> d que sta 125

L1 (471233)SEA FILE=REGISTRY ABB=ON PLU=ON C3/ESS
 L2 STR



VAR G1=6/8/11/21/X

VAR G2=6/NH2/16/19

VAR G3=AK/CY

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 7

CONNECT IS M2 RC AT 9

CONNECT IS X4 RC AT 22

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

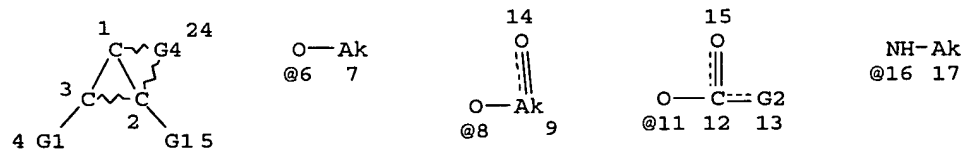
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

L3 2427 SEA FILE=REGISTRY SUB=L1 SSS FUL L2

L22 STR



VAR G1=6/8/11/21/X

VAR G2=6/NH2/16/19

VAR G3=AK/CY

REP G4=(3-16) A

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 7

CONNECT IS M2 RC AT 9

CONNECT IS X4 RC AT 22

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 23

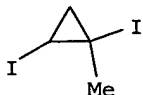
STEREO ATTRIBUTES: NONE

L24 643 SEA FILE=REGISTRY SUB=L3 SSS FUL L22

L25 1 SEA FILE=REGISTRY ABB=ON PLU=ON L24 AND I/ELS

=> d ide can 15 tot

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 653605-61-9 REGISTRY
ED Entered STN: 24 Feb 2004
CN Cyclopropane, 1,2-diiodo-1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C4 H6 I2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



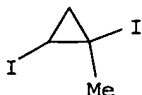
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:148093

=> d ide can 111 tot

L11 ANSWER 1 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 653605-61-9 REGISTRY
ED Entered STN: 24 Feb 2004
CN Cyclopropane, 1,2-diiodo-1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C4 H6 I2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

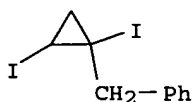


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:148093

L11 ANSWER 2 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 653605-60-8 REGISTRY
ED Entered STN: 24 Feb 2004
CN Benzene, [(1,2-diiodocyclopropyl)methyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C10 H10 I2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

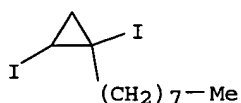


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:148093

L11 ANSWER 3 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 653605-59-5 REGISTRY
ED Entered STN: 24 Feb 2004
CN Cyclopropane, 1,2-diiodo-1-octyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H20 I2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

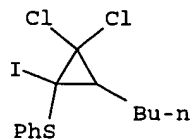


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:148093

L11 ANSWER 4 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 208588-05-0 REGISTRY
ED Entered STN: 16 Jul 1998
CN Benzene, [(3-butyl-2,2-dichloro-1-iodocyclopropyl)thio]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H15 Cl2 I S
SR CA
LC STN Files: CA, CAPLUS



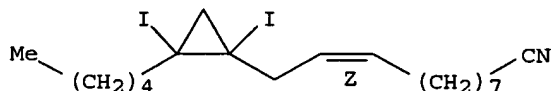
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:54423

L11 ANSWER 5 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 186520-95-6 REGISTRY
ED Entered STN: 27 Feb 1997
CN 9-Undecenitrile, 11-(1,2-diiodo-2-pentylcyclopropyl)-, (Z)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H31 I2 N
SR CA
LC STN Files: CA, CAPLUS

Double bond geometry as shown.



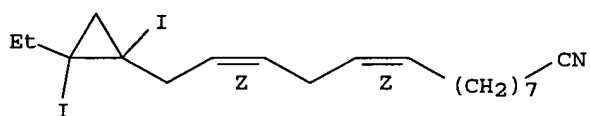
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 126:143996.

L11 ANSWER 6 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 186520-94-5 REGISTRY
ED Entered STN: 27 Feb 1997
CN 9,12-Tetradecadienenitrile, 14-(2-ethyl-1,2-diiodocyclopropyl)-, (Z,Z)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H29 I2 N
SR CA
LC STN Files: CA, CAPLUS

Double bond geometry as shown.



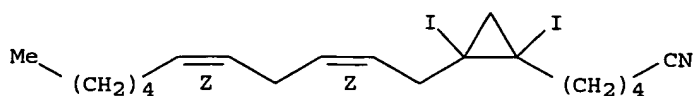
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 126:143996

L11 ANSWER 7 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 186520-93-4 REGISTRY
ED Entered STN: 27 Feb 1997
CN Cyclopropanepentanenitrile, 1,2-diiodo-2-(2,5-undecadienyl)-, (Z,Z)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H29 I2 N
SR CA
LC STN Files: CA, CAPLUS

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 126:143996

L11 ANSWER 8 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 152389-82-7 REGISTRY
ED Entered STN: 20 Jan 1994
CN Cyclopropane, 1,2-dibutyl-1,2-diiodo-, cis- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C11 H20 I2
SR CA
LC STN Files: CA, CAPLUS, CASREACT

Relative stereochemistry.



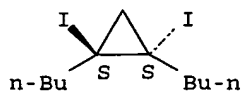
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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 120:77057

L11 ANSWER 9 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 152389-81-6 REGISTRY
ED Entered STN: 20 Jan 1994
CN Cyclopropane, 1,2-dibutyl-1,2-diiodo-, trans- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclopropane, 1,2-dibutyl-1,2-diiodo-, trans-(±)-
FS STEREOSEARCH
MF C11 H20 I2
SR CA
LC STN Files: CA, CAPLUS, CASREACT

Relative stereochemistry.



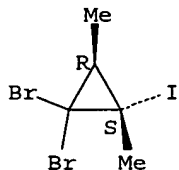
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 120:77057

L11 ANSWER 10 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 148352-34-5 REGISTRY
 ED Entered STN: 29 Jun 1993
 CN Cyclopropane, 1,1-dibromo-2-iodo-2,3-dimethyl-, trans- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C5 H7 Br2 I
 SR CA
 LC STN Files: CA, CAPLUS

Relative stereochemistry.



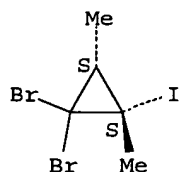
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:116836

L11 ANSWER 11 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 148352-33-4 REGISTRY
 ED Entered STN: 29 Jun 1993
 CN Cyclopropane, 1,1-dibromo-2-iodo-2,3-dimethyl-, cis- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C5 H7 Br2 I
 SR CA
 LC STN Files: CA, CAPLUS

Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

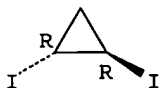
1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:116836

L11 ANSWER 12 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 105285-97-0 REGISTRY
 ED Entered STN: 22 Nov 1986
 CN Cyclopropane, 1,2-diiodo-, (1R,2R)-rel- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Cyclopropane, 1,2-diiodo-, trans-
 OTHER NAMES:

CN trans-1,2-Diiodocyclopropane
 FS STEREOSEARCH
 MF C3 H4 I2
 SR CA
 LC STN Files: BEILSTEIN*, CA, CAPLUS, USPATFULL
 (*File contains numerically searchable property data)

Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

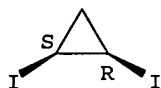
REFERENCE 1: 140:148093

REFERENCE 2: 140:93628

REFERENCE 3: 105:225635

L11 ANSWER 13 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 105285-96-9 REGISTRY
 ED Entered STN: 22 Nov 1986
 CN Cyclopropane, 1,2-diiodo-, (1R,2S)-rel- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Cyclopropane, 1,2-diiodo-, cis-
 OTHER NAMES:
 CN cis-1,2-Diiodocyclopropane
 FS STEREOSEARCH
 MF C3 H4 I2
 SR CA
 LC STN Files: BEILSTEIN*, CA, CAPLUS
 (*File contains numerically searchable property data)

Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

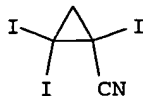
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 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:93628

REFERENCE 2: 105:225635

L11 ANSWER 14 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 103867-96-5 REGISTRY
 ED Entered STN: 24 Aug 1986
 CN Cyclopropanecarbonitrile, 1,2,2-triiodo- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C4 H2 I3 N
 SR CA

LC STN Files: CA, CAPLUS, CASREACT

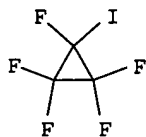


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 105:97027

L11 ANSWER 15 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 22485-44-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN Cyclopropane, pentafluoriodo- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Iodopentafluorocyclopropane
FS 3D CONCORD
MF C3 F5 I
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

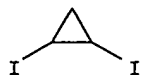
REFERENCE 1: 121:304037

REFERENCE 2: 90:136877

REFERENCE 3: 80:3136

REFERENCE 4: 70:46649

L11 ANSWER 16 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 19533-52-9 REGISTRY
ED Entered STN: 16 Nov 1984
CN Cyclopropane, 1,2-diiodo- (6CI, 8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C3 H4 I2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)



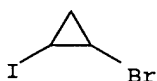
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 55:37793

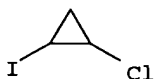
REFERENCE 2: 24:16890

L11 ANSWER 17 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 19533-51-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN Cyclopropane, 1-bromo-2-iodo- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C3 H4 Br I



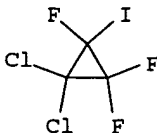
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L11 ANSWER 18 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 19533-49-4 REGISTRY
ED Entered STN: 16 Nov 1984
CN Cyclopropane, 1-chloro-2-iodo- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C3 H4 Cl I



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L11 ANSWER 19 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN 17371-09-4 REGISTRY
ED Entered STN: 16 Nov 1984
CN Cyclopropane, 1,1-dichloro-2-iodo-2,3,3-trifluoro- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C3 Cl2 F3 I
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 68:25302

=> b hcap

FILE 'HCAPLUS' ENTERED AT 14:01:22 ON 18 JUL 2006
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FILE COVERS 1907 - 18 Jul 2006 VOL 145 ISS 4
 FILE LAST UPDATED: 17 Jul 2006 (20060717/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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L36 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:117244 HCAPLUS
 DN 140:148093
 ED Entered STN: 13 Feb 2004
 TI Stable ethylene inhibiting compounds and their preparation
 IN Jacobson, Richard Martin; Kelly, Martha Jean; James, William Nixon, Jr.
 PA Rohm and Haas Company, USA
 SO Eur. Pat. Appl., 17 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 IC ICM C07C-0017/04
 ICS C07C-0023/04; C07C-0017/23; A01N-0003/02; A01N-0027/00
 CC 45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 Section cross-reference(s): 11, 23
 FAN.CNT 1

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	BR2003002503	A	20040824	2003BR-0002503	20030728 <--
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	CN---1480438	A	20040310	2003CN-0152591	20030805 <--
	JP2004131476	A2	20040430	2003JP-0286729	20030805 <--
PRAI	2002US-401308P	P	20020806	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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ICS C07C-0023/04; C07C-0017/23; A01N-0003/02; A01N-0027/00
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C07C017/02+23/04; C07C017/02+23/18; C07C017/10+23/04;
C07C017/26B2+21/14; C07C023/04; C07C023/18; C07C025/18;
C07C043/12M; C07C043/192; C07C043/225; C07C043/313;
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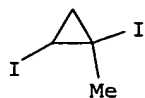
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 4H006/AC13; 4H006/AD40; 4H006/BE21; 4H006/EA12;
 4H011/AB03; 4H011/BB02; 4H011/CA03; 4H011/CA04;
 4H011/CB10; 4H011/CB11

OS MARPAT 140:148093
 AB A method to inhibit the ethylene response in plants with cyclopropene
 compds. is achieved by first generating stable cyclopropane precursor
 compds. and then converting these compds. to the gaseous cyclopropene
 antagonist compound using a reducing or nucleophilic agent.
 ST ethylene inhibitor cyclopropene deriv
 IT 141493-79-OP, 1,1,2-Tribromo-2-hexylcyclopropane
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (cyclic reaction with bromoform; cyclopropene derivative as ethylene
 inhibiting compds.)
 IT 13249-60-OP, 2-Bromooct-1-ene
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
 (Reactant or reagent)
 (cyclic reaction with bromoform; cyclopropene derivative as ethylene
 inhibiting compds.)
 IT 593-60-2, Vinyl bromide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclic reaction with bromoform; cyclopropene derivative as ethylene
 inhibiting compds.)
 IT 74-85-1, Ethylene, miscellaneous
 RL: MSC (Miscellaneous)
 (cyclopropene derivative as ethylene inhibiting compds.)
 IT 75-25-2, Bromoform 513-31-5, 2,3-Dibromopropene
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclopropene derivative as ethylene inhibiting compds.)
 IT 653605-61-9P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
 (Reactant or reagent)
 (precursor and reduction with zinc; cyclopropene derivative as ethylene
 inhibiting compds.)
 IT 40745-72-OP 105285-97-OP, trans-1,2-Diiodocyclopropane
 178425-55-3P 653605-59-5P 653605-60-8P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (precursor; cyclopropene derivative as ethylene inhibiting compds.)
 IT 3100-04-7, 1-Methylcyclopropene
 RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological
 study); RACT (Reactant or reagent); USES (Uses)
 (reaction with iodine and ethylene antagonist; cyclopropene derivative as
 ethylene inhibiting compds.)
 IT 75-19-4, Cyclopropane 50915-83-8, 1-Octylcyclopropane 454251-42-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with iodine; cyclopropene derivative as ethylene inhibiting
 compds.)
 IT 67-66-3, Chloroform, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with vinyl bromide; cyclopropene derivative as ethylene
 inhibiting compds.)
 IT 653605-61-9P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
 (Reactant or reagent)
 (precursor and reduction with zinc; cyclopropene derivative as ethylene
 inhibiting compds.)
 RN 653605-61-9 HCAPLUS

CN Cyclopropane, 1,2-diiodo-1-methyl- (9CI) (CA INDEX NAME)



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L42 ANSWER 1 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:961457 HCAPLUS
 DN 140:93628
 ED Entered STN: 10 Dec 2003
 TI Electronic and geometrical structures of cyclopropanes. Part 2.
 Photoelectron spectra and electronic structures of halogenocyclopropanes.
 Linear correlation of ionization energies with C-C bond lengths
 AU Rademacher, Paul; Poppek, Rainer; Kowski, Klaus; Schrumpf, Gerd
 CS Institut fur Organische Chemie, Universitat Duisburg-Essen, Essen, 45117,
 Germany
 SO Journal of Molecular Structure (2003), 661-662, 247-258
 CODEN: JMOSE4; ISSN: 0022-2860
 PB Elsevier Science B.V.
 DT Journal
 LA English
 CC 22-9 (Physical Organic Chemistry)
 Section cross-reference(s): 73
 AB PE spectra of six chloro- (1-6), four bromo- (7-10) and two
 iodicyclopropanes (11, 12) have been measured and analyzed using
 semiempirical PM3 and DFT B3LYP calcns. The spectra are dominated by
 strong ionizations of electrons from the halogen atoms. The first IP of
 all chloro derivs. has a rather constant value of 10.22-10.32 eV. The same
 holds for the bromo (IP1: 9.90-9.94 eV) and the iodo derivs. (IP1:
 9.13-9.15 eV). In the central region of the spectra, ionizations related
 to the Walsh orbitals σ_A (IP: 11.2-14.2 eV) and σ_S (IP:
 11.6-13.9 eV), which interact to different extents with n orbitals of the
 halogens, are found. A linear relationship, $\Delta IP_0 = 0.375$
 $\Delta r + 0.165$, between ΔIP_0 (in eV), the difference of the
 IPs related to the Walsh orbitals σ_S and σ_A of the
 three-membered ring, and Δr (in pm), the difference of vicinal and
 distal C-C bond lengths, is established.
 ST halogenocyclopropane electronic structure photoelectron spectroscopy DFT
 IT Bond length
 (carbon-carbon; photoelectron spectroscopy and DFT study on electronic
 structure of halogenocyclopropanes)
 IT Correlation analysis
 (ionization energy vs. C-C bond length; photoelectron spectroscopy and
 DFT study on electronic structure of halogenocyclopropanes)
 IT Molecular structure
 (optimized; photoelectron spectroscopy and DFT study on electronic
 structure of halogenocyclopropanes)
 IT Electronic structure
 Formation enthalpy
 Ionization potential
 Photoelectron spectra
 Total energy
 (photoelectron spectroscopy and DFT study on electronic structure of
 halogenocyclopropanes)
 IT Ionization potential
 (vertical; photoelectron spectroscopy and DFT study on electronic
 structure of halogenocyclopropanes)
 IT 2088-35-9, 1,1-Dichlorocyclopropane 4333-56-6, Bromocyclopropane
 7393-45-5, Chlorocyclopropane 16837-83-5, trans-1,2-Dibromocyclopropane

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 cis-1,2-Dichlorocyclopropane 66236-50-8, cis-1,2-Dibromocyclopropane
 88489-55-8, cis-1,2,3-Trichlorocyclopropane 88699-97-2
 105285-96-9, cis-1,2-Diodocyclopropane 105285-97-0,
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 RL: PRP (Properties)

(photoelectron spectroscopy and DFT study on electronic structure of
 halogenocyclopropanes)

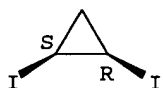
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- (1) Abeywickrema, R; J Am Chem Soc 1984, V106, P7321 HCAPLUS
- (2) Allen, F; Acc Chem Res 1983, V16, P146 HCAPLUS
- (3) Arduengo, A; J Am Chem Soc 1994, V116, P6641 HCAPLUS
- (4) Becke, A; J Chem Phys 1993, V98, P5648 HCAPLUS
- (5) Beckhaus, H; Angew Chem 1978, V90, P633 HCAPLUS
- (6) Beckhaus, H; Angew Chem Int Ed Engl 1978, V17, P593
- (7) Bergner, A; Mol Phys 1993, V80, P1431 HCAPLUS
- (8) Brogli, F; Helv Chim Acta 1971, V54, P1423 HCAPLUS
- (9) Clark, T; J Am Chem Soc 1984, V106, P4412 HCAPLUS
- (10) Cremer, D; The Chemistry of the Cyclopropyl Group 1995, V2, P43 HCAPLUS
- (11) de Meijere, A; Angew Chem 1979, V91, P867 HCAPLUS
- (12) de Meijere, A; Angew Chem Int Ed Engl 1979, V18, P809
- (13) Della, E; Aust J Chem 1985, V38, P69 HCAPLUS
- (14) Della, E; J Chem Soc, Perkin Trans 1984, V2, P1653
- (15) Eland, J; Photoelectron Spectroscopy, second ed 1984
- (16) Flukiger, P; MOLEKEL Version 4.3 2002
- (17) Frisch, M; GAUSSIAN 98, Revision A.7 1998
- (18) Gauss, J; J Phys Chem A 2000, V104, P1319 HCAPLUS
- (19) Gleiter, R; Top Curr Chem 1979, V86, P197 HCAPLUS
- (20) Gunthard, H; Helv Chim Acta 1993, V76, P631
- (21) Gunther, H; Tetrahedron Lett 1970, P5173
- (22) Hammerschmidt, F; Monatsh Chem 1977, V108, P1253 HCAPLUS
- (23) Hashmall, J; Angew Chem 1970, V82, P320
- (24) Hashmall, J; Angew Chem Int Ed Engl 1970, V9, P305 HCAPLUS
- (25) Hedberg, L; J Chem Phys 1982, V77, P2996 HCAPLUS
- (26) Hoffmann, R; J Chem Phys 1964, V40, P2480 HCAPLUS
- (27) Hoffmann, R; Tetrahedron Lett 1970, P2907 HCAPLUS
- (28) Holland, D; J Electron Spectrosc Relat Phen 2002, V125, P57 HCAPLUS
- (29) Honegger, E; Chem Ber 1985, V118, P2927 HCAPLUS
- (30) Honegger, E; Chem Ber 1987, V120, P187 HCAPLUS
- (31) Kimura, K; Handbook of HeI Photoelectron Spectra of Fundamental Organic Molecules 1981
- (32) Koch, W; A Chemist's Guide to Density Functional Theory 2000
- (33) Koopmans, T; Physica 1934, V1, P104
- (34) Lazarou, Y; J Phys Chem A 2001, V105, P6729 HCAPLUS
- (35) Lecoultre, J; Collect Czech Chem Commun 1988, V53, P2385 HCAPLUS
- (36) Marsden, C; J Phys Chem 1988, V92, P1766 HCAPLUS
- (37) Novak, I; J Mol Struct 1993, V297, P383 HCAPLUS
- (38) Portmann, S; Chimia 2000, V54, P766 HCAPLUS
- (39) Prins, I; Tetrahedron 1977, V33, P127 HCAPLUS
- (40) Prossimi, R; Chem Phys Lett 2002, V359, P473 HCAPLUS
- (41) Rabalais, J; Principles of Ultraviolet Photoelectron Spectroscopy 1977
- (42) Rademacher, P; Chem Eur J 2003, V9, P2953 HCAPLUS
- (43) Rademacher, P; Chem Phys Chem, in press 2003
- (44) Rademacher, P; Chem Rev 2003, V103, P933 HCAPLUS
- (45) Roszak, S; Chem Phys Lett 1993, V208, P225 HCAPLUS
- (46) Rozsondai, B; The Chemistry of the Cyclopropyl Group 1995, V2, P139 HCAPLUS
- (47) Schrumpf, G; Acta Cryst C 1987, V43, P1182
- (48) Schrumpf, G; Acta Cryst C 1987, V43, P1188
- (49) Schrumpf, G; J Mol Struct 1983, V102, P209 HCAPLUS
- (50) Schrumpf, G; J Mol Struct 1983, V102, P215 HCAPLUS
- (51) Schrumpf, G; Spectrochim Acta A 1988, V44, P1099
- (52) Schwendeman, R; J Chem Phys 1964, V40, P1022 HCAPLUS
- (53) Seetz, J; Tetrahedron Lett 1981, V22, P4855 HCAPLUS
- (54) Serena Software; PCMODEL, Version 8.0 2002

(55) Stewart, J; J Comput Chem 1989, V221, P264
 (56) Stewart, J; MOPAC93.00 Manual 1993
 (57) Stowasser, R; J Am Chem Soc 1999, V121, P3414 HCAPLUS
 (58) Sustmann, R; Chem Ber 1987, V120, P1323 HCAPLUS
 (59) Tidwell, T; The Chemistry of the Cyclopropyl Group 1987, P565
 (60) Turner, D; Molecular Photoelectron Spectroscopy 1970
 (61) Weyerstahl, P; Chem Ber 1967, V100, P1858 HCAPLUS
 (62) Wiberg, K; J Am Chem Soc 1960, V82, P6375 HCAPLUS
 IT 105285-96-9, cis-1,2-Diodocyclopropane 105285-97-0,
 trans-1,2-Diodocyclopropane
 RL: PRP (Properties)
 (photoelectron spectroscopy and DFT study on electronic structure of
 halogenocyclopropanes)
 RN 105285-96-9 HCAPLUS
 CN Cyclopropane, 1,2-diiodo-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

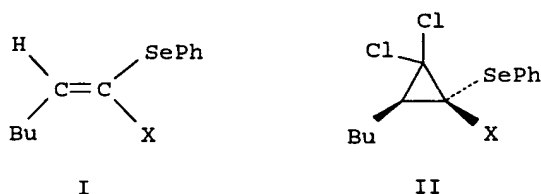


RN 105285-97-0 HCAPLUS
 CN Cyclopropane, 1,2-diiodo-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L42 ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1998:319636 HCAPLUS
 DN 129:54423
 ED Entered STN: 29 May 1998
 TI Highly functionalized selenocyclopropanes from 1-halo-1-chalcogeno alkenes
 AU Stefani, Helio A.; Petraghani, Nicola; Comasseto, Joao V.; Braga, Antonio
 L.; Menezes, Paulo H.
 CS Faculdade de Ciencias Farmaceuticas, Departamento de Farmacia,
 Universidade de Sao Paulo, Sao Paulo, Brazil
 SO Synthetic Communications (1998), 28(9), 1667-1677
 CODEN: SYNCAV; ISSN: 0039-7911
 PB Marcel Dekker, Inc.
 DT Journal
 LA English
 CC 29-8 (Organometallic and Organometalloidal Compounds)
 Section cross-reference(s): 24
 OS CASREACT 129:54423
 GI



AB Dicloro and dibromo carbenes, generated under phase transfer conditions, add to 1-halo-1-chalcogeno alkenes, to give highly functionalized selenocyclopropanes in good yields. For example alkenes I (X = Cl, Br, I) underwent cyclopropanation with dichlorocarbene to yield II (X = Cl, Br, I) in 71-83% yield.

ST selenocyclopropane prepn cyclopropanation selenoalkene dichlorocarbene dibromocarbene; carbene dichloro dibromo cyclopropanation selenium alkene; alkene halo chalcogeno cyclopropanation dihalocarbene; phase transfer generated dichlorocarbene dibromocarbene

IT Cyclopropanation
(preparation of highly functionalized selenocyclopropanes from reaction of halo chalcogeno alkenes with dichloro and dibromo carbenes under phase transfer conditions)

IT Alkenes, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(seleno; cyclopropanation with dichloro and dibromo carbenes generated under phase transfer conditions, in synthesis of selenocyclopropanes)

IT 155169-80-5 155169-81-6 155169-82-7 208588-06-1 208588-07-2
208588-08-3 208588-09-4 208588-10-7 208588-11-8 208588-12-9
208588-13-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclopropanation with dichloro and dibromo carbenes generated under phase transfer conditions, in synthesis of selenocyclopropanes)

IT 208587-93-3P 208587-94-4P 208587-95-5P 208587-96-6P 208587-97-7P
208587-98-8P 208587-99-9P 208588-00-5P 208588-01-6P 208588-02-7P
208588-03-8P 208588-04-9P 208588-05-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of highly functionalized selenocyclopropanes from reaction of halo chalcogeno alkenes with dichloro and dibromo carbenes under phase transfer conditions)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

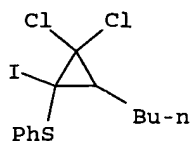
RE

(1) Braga, A; PhD Thesis, Universidade de Sao Paulo 1989
(2) Braga, A; Synth Commun 1994, V24, P1165 HCAPLUS
(3) Campos, I; Quim Nova 1993, V16, P186 HCAPLUS
(4) Comasseto, J; Synth Commun 1990, V20, P751 HCAPLUS
(5) Comasseto, J; Tetrahedron 1996, V52, P9687 HCAPLUS
(6) Engel, P; Chimia 1992, V46, P380 HCAPLUS
(7) Paquette, L; Chem Rev 1986, V86, P732
(8) Stefani, H; Chem Research (S) 1994, P112 HCAPLUS

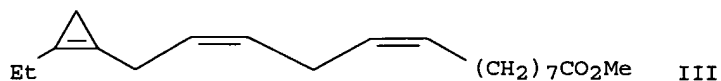
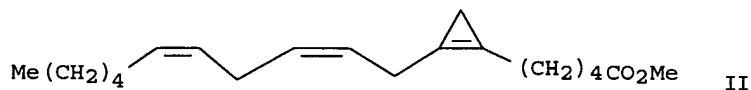
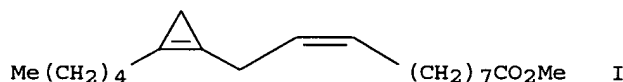
IT 208588-05-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of highly functionalized selenocyclopropanes from reaction of halo chalcogeno alkenes with dichloro and dibromo carbenes under phase transfer conditions)

RN 208588-05-0 HCAPLUS

CN Benzene, [(3-butyl-2,2-dichloro-1-iodocyclopropyl)thio]- (9CI) (CA INDEX NAME)



L42 ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1997:39340 HCAPLUS
 DN 126:143996
 ED Entered STN: 18 Jan 1997
 TI Synthesis of putative $\Delta 6$ -, $\Delta 12$ - and $\Delta 15$ -desaturase inhibitors
 AU Al Dulayymi, Juma'a R.; Baird, Mark S.; Dale, Cynthia M.; Grehan, Brendan J.; Shortt, M. Fiona
 CS Dep. Chemistry, Univ. Wales, Bangor, Gwynedd, LL57 2UW, UK
 SO Tetrahedron (1997), 53(3), 1099-1110
 CODEN: TETRAB; ISSN: 0040-4020
 PB Elsevier
 DT Journal
 LA English
 CC 26-3 (Biomolecules and Their Synthetic Analogs)
 GI



AB Cyclopropene fatty acid esters I-III have been synthesized as potential structure-based inhibitors of $\Delta 6$ -, $\Delta 12$ - and $\Delta 15$ -desaturases.
 ST ethylcyclopropenyltetradecadienoate prepn; pentylcyclopropenylundecenoate prepn; undecadienylcyclopropenylpentanoate prepn; cyclopropenyl unsatd fatty acid ester prepn
 IT Fatty acids, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (unsatd., esters; preparation of cyclopropenyl unsatd. fatty acid esters as desaturase inhibitors)
 IT 107-19-7, Propargyl alcohol 110-53-2, 1-Bromopentane 3252-91-3,
 2-Bromo-1-heptene 6940-78-9, 1-Bromo-4-chlorobutane 23074-36-4,
 2-Bromo-1-butene 68105-93-1, 1-Bromo-7-chloroheptane 186520-84-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of cyclopropenyl unsatd. fatty acid esters as desaturase inhibitors)

IT 10297-06-0P, 6-Chloro-1-hexyne 18495-27-7P, 1-Bromo-2-octyne
 20739-58-6P, 2-Octyn-1-ol 35378-79-1P, 2,5-Undecadiyn-1-ol 75817-50-4P
 75817-51-5P 136339-45-2P 141493-78-9P 157978-76-2P 186520-79-6P,
 2-Bromo-6-chloro-1-hexene 186520-80-9P 186520-81-0P 186520-82-1P
 186520-83-2P 186520-85-4P 186520-86-5P 186520-87-6P 186520-88-7P
 186520-89-8P 186520-90-1P 186520-91-2P 186520-92-3P
 186520-93-4P 186520-94-5P 186520-95-6P
 186520-96-7P 186520-97-8P 186520-98-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of cyclopropenyl unsatd. fatty acid esters as desaturase
 inhibitors)

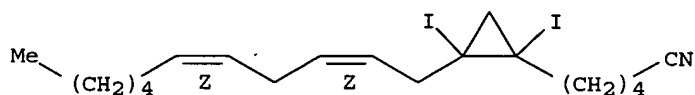
IT 186520-99-0P 186521-00-6P 186521-01-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of cyclopropenyl unsatd. fatty acid esters as desaturase
 inhibitors)

RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Al Dulayymi, J; Tetrahedron 1996, V38, P12509
- (2) Al Dulayymi, J; Unpublished results
- (3) Andiranaivofehivola, A; Biochim Biophys Acta 1993, P1210
- (4) Ando, T; J Pesticide Sci 1995, V20, P25 HCAPLUS
- (5) Andrianaivorafehivola, A; Food and Chemical Toxicology 1995, V33, P377 HCAPLUS
- (6) Andrianaivorafehivola, A; Oleagineux 1994, V49, P177 HCAPLUS
- (7) Andrianaivorafehivola, A; Revue Francaise des Corps Gras 1994, V41, P53 HCAPLUS
- (8) Arsequell, G; Chem and Phys Lipids 1992, V63, P149 HCAPLUS
- (9) Arsequell, G; Insect Biochem 1989, V19, P623 HCAPLUS
- (10) Baird, M; J Chem Soc Perkin Trans 1
- (11) Baird, M; J Chem Soc Perkin Trans I 1993, P1547 HCAPLUS
- (12) Baird, M; Tetrahedron Letts 1992, P1521 HCAPLUS
- (13) Barbier, M; Bull Soc Chim Fr 1961, P1324 HCAPLUS
- (14) Besra, G; Chem Phys Lipids 1993, V66, P35 HCAPLUS
- (15) Binder, R; Ent Exp Appl 1982, V31, P291 HCAPLUS
- (16) Booyens, J; Medical Hypotheses 1985, V18, P53 HCAPLUS
- (17) Brandsma, L; Studies in Organic Chemistry, 2 dn Edn 1988, P59
- (18) Brenner, R; Lipids 1970, V6, P567
- (19) Brown, C; J Chem Soc, Chem Comm 1973, P553 HCAPLUS
- (20) Brown, C; J Org Chem 1973, V38, P2226 HCAPLUS
- (21) Corvin, L; Exp Cell Res 1977, V108, P341
- (22) Cousseau, J; Synthesis 1980, P805 HCAPLUS
- (23) Fermor, B; Eur J Cancer 1992, V28A, P1143 HCAPLUS
- (24) Fogerty, A; Lipids 1977, V7, P335
- (25) Gleason, J; US---4352757 HCAPLUS
- (26) Gleason, J; Tetrahedron Letts 1980, P1129 HCAPLUS
- (27) Gosalbo, L; Arch Insect Biochem and Phys 1994, V26, P279 HCAPLUS
- (28) Gosalbo, L; Insect Biochem and Mol Biol 1992, V22, P687 HCAPLUS
- (29) Gosalbo, L; Lipids 1993, V28, P1125 HCAPLUS
- (30) Graham, J; Evening Primrose Oil 1993
- (31) Grandall, J; Tetrahedron Letts 1991, P3659
- (32) Hardy, D; Phytochemistry 1991, V30, P2889 HCAPLUS
- (33) Hartmann, S; Chem Phys Lipids 1994, V65, P99
- (34) Horrobin, D; Am J Clinical Nutr 1993, V57, P732S HCAPLUS
- (35) Horrobin, D; Medical Hypotheses 1981, V7, P1211 HCAPLUS
- (36) James, A; Eur J Biochem 1968, V3, P318 HCAPLUS
- (37) Jeffcoat, R; Lipids 1977, V12, P480 HCAPLUS
- (38) Johnson, A; Lipids 1969, V4, P265 HCAPLUS
- (39) Johnson, A; Nature (London) 1967, V214, P1244 HCAPLUS
- (40) Khoo, D; Brit J Cancer 1991, V63, P97 HCAPLUS
- (41) Macfarlane, J; Nature (London) 1957, V179, P830 MEDLINE
- (42) Masson, J; Texas Agr Expt Sta Bull 1893, V29, P347
- (43) Moreton, R; E P Appl, 853 01700.2 1985
- (44) Moreton, R; Single Cell Oil 1985
- (45) Morris, L; Chem Ind (London) 1967, P32 HCAPLUS
- (46) Nunn, J; J Chem Soc 1952, P313 HCAPLUS

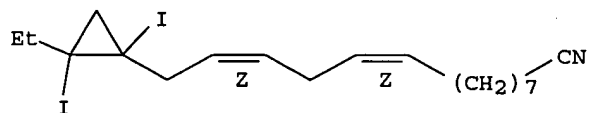
(47) Raju, P; Biochem Biophys Acta 1969, V179, P48
 (48) Rolph, C; Appl Microbiol Biotechnol 1990, V34, P91 HCAPLUS
 (49) Rosie, D; Lipids 1971, V6, P623 HCAPLUS
 (50) Serebrennikova, G; Doklady Akad Nauk SSSR, Ser Khim 1961, V140, P1083
 (51) Sherwood, R; Texas Agr Expt Sta Bull 1928, V376, P12
 (52) Tumbelaka, L; Biology of Reproduction 1994, V50, P253 HCAPLUS
 (53) Vavich, M; Science 1957, V126, P751
 (54) Wheeler, P; Lett Appl Microbiol 1993, V17, P33 HCAPLUS
 (55) Zoeller, R; Lipids 1984, V19, P529 HCAPLUS
 (56) Zoeller, R; Lipids 1984, V19, P529 HCAPLUS
 IT 186520-93-4P 186520-94-5P 186520-95-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of cyclopropenyl unsatd. fatty acid esters as desaturase
 inhibitors)
 RN 186520-93-4 HCAPLUS
 CN Cyclopropanepentanenitrile, 1,2-diiodo-2-(2,5-undecadienyl)-, (Z,Z)- (9CI)
 (CA INDEX NAME)

Double bond geometry as shown.



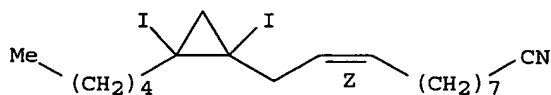
RN 186520-94-5 HCAPLUS
 CN 9,12-Tetradecadienenitrile, 14-(2-ethyl-1,2-diiodocyclopropyl)-, (Z,Z)-
 (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 186520-95-6 HCAPLUS
 CN 9-Undecenitrile, 11-(1,2-diiodo-2-pentylcyclopropyl)-, (Z)- (9CI) (CA
 INDEX NAME)

Double bond geometry as shown.



L42 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1995:458169 HCAPLUS
 DN 123:198309
 ED Entered STN: 31 Mar 1995
 TI Cyclopropana-fusion to seven-membered unsaturated rings. The synthesis of
 4-bromo-8,8-dimethylbicyclo[5.1.0]octa-1,4,6-trien-3-one, a
 cyclopropana-fused tropone
 AU Sims, Colette G.; Wege, Dieter
 CS Department of Chemistry, University of Western Australia, Nedlands, 6009,
 Australia
 SO Australian Journal of Chemistry (1995), 48(3), 469-90
 CODEN: AJCHAS; ISSN: 0004-9425
 PB Commonwealth Scientific and Industrial Research Organization

DT Journal
 LA English
 CC 24-7 (Alicyclic Compounds)
 OS CASREACT 123:198309
 AB This paper addresses the problem of preparing novel species such as the cyclopropa-fused tropylium ion and cyclopropa-fused tropones and tropolones. Addition of dibromocarbene and dichlorocarbene to the adduct derived from di-Me 3,3-dimethylcyclopropene-1,2-dicarboxylate and buta-1,3-diene yields the anti-tricyclo[5.1.0.03,5]octyl derivs. which after hydrolysis and halodecarboxylation were transformed into (1 α ,3 β ,5 β ,7 α)-1,4,4,7-tetrabromo-8,8-dimethyltricyclo[5.1.0.03,5]octane, (1 α ,3 β ,5 β ,7 α)-1,7-dibromo-4,4-dichloro-8,8-dimethyltricyclo[5.1.0.03,5]octane and (1 α ,3 β ,5 β ,7 α)-4,4-dichloro-1,7-diiodo-8,8-dimethyltricyclo[5.1.0.03,5]octane. All of these halides were remarkably stable towards dehydrohalogenation and this is attributed to the rigidity of the tricyclic ring system. The reaction of (1 α ,3 β ,5 β ,7 α)-1,7-diiodo-8,8-dimethyltricyclo[5.1.0.03,5]octane with potassium tert-butoxide results in deiodination rather than dehydroiodination and gives a cyclopropene which was trapped with isobenzofuran. Addition of dibromocarbene to the isobenzofuran adducts derived from di-Me and di-tert-Bu 3,3-dimethylcyclopropene-1,2-dicarboxylate and 2-trimethylsilyloxybuta-1,3-diene followed by ring expansion gave the tricyclo[5.1.0]octyl derivs. Acidic hydrolysis of the di-tert-Bu ester afforded diacid, which on iododecarboxylation gave 4-bromo-1,7-diiodo-8,8-dimethylbicyclo[5.1.0]oct-4-en-3-one. Treatment with triethylamine afforded the title compound, the first example of a cyclopropa-fused tropone.

ST cyclopropa fused tropone bromodimethylbicyclooctatrienone prepn; bicyclooctatrienone bromodimethyl

IT 106-99-0, Butadiene, reactions 270-75-7, Isobenzofuran 5281-20-9, Acetone hydrazone 21603-23-6 38053-91-7 66086-33-7, Di-tert-butyl acetylenedicarboxylate 72566-85-9 108186-04-5 167779-98-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of bromodimethylbicyclooctatrienone as example of cyclopropa-fused tropone)

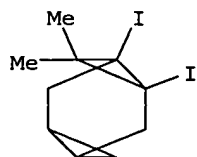
IT 539-80-ODP, Tropone, cyclopropa-fused derivative 167779-80-8P 167779-81-9P 167779-82-0P 167779-83-1P 167779-85-3P 167779-87-5P 167779-88-6P 167779-90-0P 167779-91-1P 167779-94-4P 167779-95-5P 167779-99-9P 167780-00-9P 167780-01-0P 167780-02-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of bromodimethylbicyclooctatrienone as example of cyclopropa-fused tropone)

IT 932-55-8P 167779-79-5P 167779-84-2P 167779-86-4P 167779-89-7P 167779-92-2P 167779-93-3P 167779-96-6P 167779-97-7P 167780-03-2P 167937-03-3P 753023-44-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of bromodimethylbicyclooctatrienone as example of cyclopropa-fused tropone)

IT 167779-90-0P 167780-02-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of bromodimethylbicyclooctatrienone as example of cyclopropa-fused tropone)

RN 167779-90-0 HCAPLUS

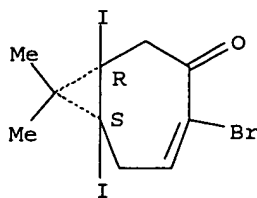
CN Tricyclo[5.1.0.03,5]octane, 1,7-diiodo-8,8-dimethyl-, (1 α ,3 β ,5 β ,7 α)- (9CI) (CA INDEX NAME)



RN 167780-02-1 HCAPLUS

CN Bicyclo[5.1.0]oct-4-en-3-one, 4-bromo-1,7-diiodo-8,8-dimethyl-, cis- (9CI)
(CA INDEX NAME)

Relative stereochemistry.

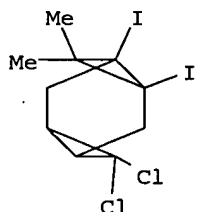


IT 167779-86-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of bromodimethylbicyclooctatrienone as example of
cyclopropa-fused tropone)

RN 167779-86-4 HCAPLUS

CN Tricyclo[5.1.0.03,5]octane, 4,4-dichloro-1,7-diiodo-8,8-dimethyl-,
(1α,3β,5β,7α)- (9CI) (CA INDEX NAME)



L42 ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1994:704037 HCAPLUS

DN 121:304037

ED Entered STN: 24 Dec 1994

TI Fluoroiodocarbon blends as CFC and Halon replacements

IN Nimitz, Jonathan S.; Lankford, Lance H.

PA USA

SO PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C09K-0005/04

ICS C09K-0003/30; A62D-0001/00; C08J-0009/14

CC 48-5 (Unit Operations and Processes)

Section cross-reference(s): 38, 50, 59

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO---9420588	A1	19940915	1994WO-US02321	19940303 <--
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO,				

RU, SD, SE, SK, UA, UZ, VN
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
 BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

US---5611210	A	19970318	1993US-0027227	19930305 <--
CA---2157567	AA	19940915	1994CA-2157567	19940303 <--
CA---2157567	C	20041130		
AU---9463587	A1	19940926	1994AU-0063587	19940303 <--
EP---687287	A1	19951220	1994EP-0910828	19940303 <--
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BR---9405991	A	19951226	1994BR-0005991	19940303 <--
CN---1122606	A	19960515	1994CN-0191986	19940303 <--
CN---1052031	B	20000503		
JP--08507524	T2	19960813	1994JP-0520174	19940303 <--
RU---2140955	C1	19991110	1995RU-0121752	19940303 <--
AT---193903	E	20000615	1994AT-0910828	19940303 <--
US---5444102	A	19950822	1994US-0269324	19940630 <--
US---5605647	A	19970225	1994US-0268583	19940630 <--
US---5685915	A	19971111	1994US-0268587	19940630 <--
US---5674451	A	19971007	1995US-0401384	19950217 <--
US---5562861	A	19961008	1995US-0414566	19950331 <--
US---5716549	A	19980210	1996US-0701669	19960822 <--
US---5695688	A	19971209	1996US-0707960	19960910 <--
PRAI 1993US-0027227	A	19930305	<--	
1994WO-US02321	W	19940303	<--	
1995US-0414566	A3	19950331	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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	ICS	C09K-0003/30; A62D-0001/00; C08J-0009/14
	IPCI	C09K0005-04 [ICM,5]; C09K0005-00 [ICM,5,C*]; C09K0003-30 [ICS,5]; A62D0001-00 [ICS,5]; C08J0009-14 [ICS,5]; C08J0009-00 [ICS,5,C*]
	IPCR	A62D0001-00 [I,A]; A62D0001-00 [I,C*]; C08J0009-00 [I,C*]; C08J0009-14 [I,A]; C09K0003-30 [I,A]; C09K0003-30 [I,C*]; C09K0005-00 [I,C*]; C09K0005-04 [I,A]
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[I,A]

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C07C0043-12 [ICS,6]; C07C0043-00 [ICS,6,C*];
C07C0211-15 [ICS,6]; C07C0211-00 [ICS,6,C*];
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NCL 252/002.000; 062/007.000; 062/114.000; 252/008.000;
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516/010.000; 516/198.000; 521/909.000; 521/910.000
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510/175.000; 510/202.000; 510/245.000; 510/285.000
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 ECLA A62D001/00C6; C08J009/14P; C09K003/30; C09K005/04B4B; C09K005/04B4
 AB The fluoroiodocarbons are effective, environmentally safe, nonflammable, low-toxicity refrigerants, solvents, foam blowing agents, propellants, and fire fighting agents. The agents are clean, elec. nonconductive, and have short atmospheric lifetimes, zero ozone-depletion potential, and low global warming potentials. The agents comprise ≥ 1 fluoroiodocarbon satisfying the general formula: $\text{CaHbBr c l d Fe f Ng Oh}$, where a is 1-8; b is 0-2; c, d, g and h are each 0-1; e is 1-18; and f is 1-2, either neat or mixed with additives selected from the group consisting of alcs., esters, ethers, fluoroethers, hydrocarbons, hydrofluorocarbons, and perfluorocarbons.
 ST fluoroiodocarbon blend CFC Halon replacement; refrigerant fluoroiodocarbon; fire extinguisher fluoroiodocarbon; solvent fluoroiodocarbon; foam blowing agent fluoroiodocarbon; propellant fluoroiodocarbon
 IT Propellants
 Solvents
 (fluoroiodocarbon blends as CFC and Halon replacements)
 IT Alcohols, uses
 Esters, uses
 Ethers, uses
 Hydrocarbons, uses
 Ketones, uses
 Ligroine
 Naphtha
 Perfluorocarbons

Petroleum spirits
 Stoddard solvent
 Turpentine
 RL: TEM (Technical or engineered material use); USES (Uses)
 (fluoriodocarbon blends as CFC and Halon replacements)

IT Blowing agents
 (foam; fluoriodocarbon blends as CFC and Halon replacements)

IT Refrigeration
 (agents, fluoriodocarbon blends as CFC and Halon replacements)

IT Fire
 (extinguishers, fluoriodocarbon blends as CFC and Halon replacements)

IT Hydrocarbons, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (fluoro, iodo; fluoriodocarbon blends as CFC and Halon replacements)

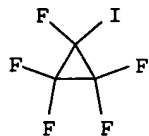
IT Ethers, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (fluoroalkyl, fluoriodocarbon blends as CFC and Halon replacements)

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 67-63-0, 2-Propanol, uses 67-64-1, Acetone, uses 71-23-8, 1-Propanol,
 uses 71-36-3, 1-Butanol, uses 71-41-0, 1-Pentanol, uses 74-98-6,
 Propane, uses 75-10-5, Difluoromethane 75-19-4, Cyclopropane
 75-21-8, Oxirane, uses 75-28-5, Isobutane 75-37-6 75-46-7,
 Trifluoromethane 75-56-9, uses 75-65-0, 2-Methyl-2-propanol, uses
 75-73-0, Tetrafluoromethane 76-16-4, Hexafluoroethane 76-19-7,
 Octafluoropropane 78-78-4, 2-Methylbutane 78-83-1,
 2-Methyl-1-propanol, uses 78-92-2, 2-Butanol 78-93-3, Butanone, uses
 79-20-9, Methyl acetate 96-14-0, 3-Methylpentane 105-37-3, Ethyl
 propanoate 105-46-4, sec-Butyl acetate 105-54-4, Ethyl butanoate
 106-97-8, Butane, uses 107-08-4 108-08-7, 2,4-Dimethylpentane
 108-20-3, Diisopropyl ether 108-21-4, Isopropyl acetate 108-88-3,
 Toluene, uses 109-60-4, n-Propyl acetate 109-66-0, Pentane, uses
 109-99-9, uses 110-19-0, Isobutyl acetate 110-54-3, Hexane, uses
 111-43-3, Di-n-propyl ether 111-65-9, Octane, uses 111-84-2, Nonane
 115-10-6, Dimethyl ether 115-25-3, Octafluorocyclobutane 123-86-4,
 n-Butyl acetate 123-91-1, 1,4-Dioxane, uses 124-18-5, Decane
 138-86-3, Limonene 141-78-6, Acetic acid ethyl ester, uses 142-82-5,
 Heptane, uses 142-92-7, Hexyl acetate 142-96-1, Di-n-butyl ether
 287-23-0, Cyclobutane 335-58-0 354-33-6, Pentafluoroethane 354-41-6,
 1,1,2,2-Tetrafluoro-1-iodoethane 354-64-3, Pentafluoriodoethane
 354-65-4, 1,1,2,2-Tetrafluoro-1,2-diiodoethane 355-25-9,
 Decafluorobutane 355-42-0, Tetradecafluorohexane 355-43-1,
 1-Iodotridecafluorohexane 373-53-5, Fluoriodomethane 377-44-6
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 1,3-diiodopropane 423-39-2, Nonafluoro-1-iodobutane 425-82-1
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 propanoate 565-59-3, 2,3-Dimethylpentane 589-34-4, 3-Methyl hexane
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 Undecane 1184-76-5, Difluorodiodomethane 1330-16-1, Pinene
 1479-49-8 1493-03-4, Difluoriodomethane 1561-52-0 1691-17-4,
 Bisdifluoromethyl ether 1885-48-9 2314-97-8, Trifluoriodomethane
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 2-Pentanol 20705-05-9, 1,1,2-Trifluoro-1-iodoethane 22485-44-5
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 RL: TEM (Technical or engineered material use); USES (Uses)
 (fluoriodocarbon blends as CFC and Halon replacements)

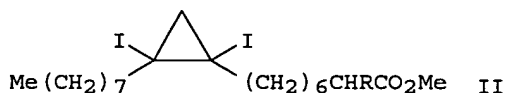
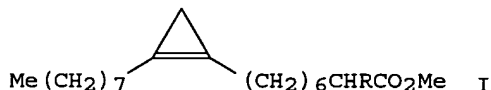
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 RL: TEM (Technical or engineered material use); USES (Uses)
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RN 22485-44-5 HCAPLUS

CN Cyclopropane, pentafluoriodo- (8CI, 9CI) (CA INDEX NAME)



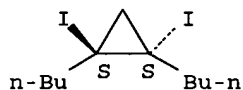
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 DN 120:77057
 ED Entered STN: 19 Feb 1994
 TI A new approach to cyclopropene fatty acids involving 1,2-deiodination
 AU Baird, Mark S.; Grehan, Brendan
 CS Dep. Chem., Univ. Wales, Bangor/Gwynedd, LL57 2UW, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and
 Bio-Organic Chemistry (1972-1999) (1993), (14), 1547-8
 CODEN: JCPRB4; ISSN: 0300-922X
 DT Journal
 LA English
 CC 26-3 (Biomolecules and Their Synthetic Analogs)
 OS CASREACT 120:77057
 GI



AB Me sterculate (I, R = H) and Me α -hydroxysterculate (I, R = OH) have
 been prepared by deiodination of 1,2-diiodocyclopropanes II with
 butyllithium at low temperature
 ST sterculate; hydroxysterculate; deiodination diiodocyclopropane;
 cyclopropane diiodo deiodination
 IT Deiodination
 (of diiodocyclopropanes with butyllithium)
 IT 152389-80-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (addition reaction with iodine)
 IT 152389-88-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidation of)
 IT 152389-89-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and conversion to cyanohydrin)
 IT 34182-90-6P 34182-91-7P 152389-81-6P 152389-82-7P
 152389-93-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and deiodination of)
 IT 152389-92-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

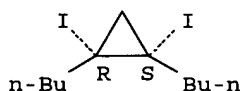
(preparation and hydrolysis of)
 IT 152389-84-9P 152389-91-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and iodination of)
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 (preparation and silylation of)
 IT 3220-60-8P, Methyl stercolate 152389-83-8P 152442-29-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 IT 152389-85-0P 152517-74-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, deblocking, and oxidation of)
 IT 108176-04-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with iodooctanol)
 IT 53596-83-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with tribromocyclopropane)
 IT 152389-81-6P 152389-82-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and deiodination of)
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 CN Cyclopropane, 1,2-dibutyl-1,2-diiodo-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

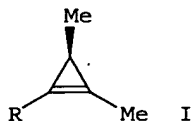


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 CN Cyclopropane, 1,2-dibutyl-1,2-diiodo-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



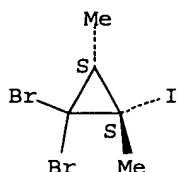
L42 ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1993:516836 HCAPLUS
 DN 119:116836
 ED Entered STN: 18 Sep 1993
 TI (R)-1,3-Dimethylcyclopropene-one isomer of the smallest chiral hydrocarbon
 AU Baird, Mark S.; Fitton, Helen L.; Clegg, William; McCamley, Andrew
 CS Dep. Org. Chem., Univ. Coll. Wales, Bangor, LL57 2UW, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1993), (3), 321-6
 CODEN: JCPRB4; ISSN: 0300-922X
 DT Journal
 LA English
 CC 24-2 (Alicyclic Compounds)
 Section cross-reference(s): 75
 OS CASREACT 119:116836
 GI



- AB 1-Lithio-1,3-dimethylcyclopropene (I, R = Li) was obtained in optically active form in five steps from tiglic acid and trapped with electrophiles to produce, a number of compds., including optically active 1,3-dimethylcyclopropene I (R = H).
- ST cyclopropene dimethyl enantiomer; tiglic acid asym conversion
lithiodimethylcyclopropene
- IT Crystal structure
Molecular structure
(of bromodimethyldiphenyloxatetracyclododecatriene)
- IT Asymmetric synthesis and induction
(of dimethylcyclopropene)
- IT 5471-63-6, 1,3-Diphenylisobenzofuran
RL: RCT (Reactant); RACT (Reactant or reagent)
(Diels-Alder reaction of, with in situ generated chiral dimethylcyclopropene)
- IT 3886-69-9, (+)-(R)- α -Methylbenzylamine
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, with chiral and racemic dibromodimethylpropanecarbonyl chlorides)
- IT 80-59-1, Tiglic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(esterification of, with isobutylene)
- IT 115-11-7, Isobutylene, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(esterification of, with tiglic acid)
- IT 86254-85-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and dibromocyclopropanation of)
- IT 148352-36-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and dimerization of)
- IT 148352-19-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)
- IT 82190-83-8P 87619-34-9P 148352-20-9P 148352-22-1P 148352-26-5P
148352-28-7P 148352-31-2P 148352-32-3P 148352-33-4P
148352-34-5P 148352-35-6P 148410-15-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
- IT 72957-66-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, amidation with chiral methylbenzylamine, and attempted chlorodecarbonylation of)
- IT 148352-24-3P 148352-25-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, bromination, and conversion into amide)
- IT 148352-21-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, debromination and crystal and mol. structure of)
- IT 99236-07-4P 178425-63-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, generation of chiral dimethylcyclopropene and Diels-Alder reaction of, with diphenylisobenzofuran)

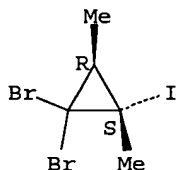
IT 148352-23-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, resolution, conversion into acid chloride, and halogenation of)
 IT 15922-78-8, N-Hydroxy-2-pyridinethione sodium salt
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with dimethyldibromocyclopropanecarbonyl chloride)
 IT 148352-33-4P 148352-34-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 148352-33-4 HCAPLUS
 CN Cyclopropane, 1,1-dibromo-2-iodo-2,3-dimethyl-, cis- (9CI) (CA INDEX
 NAME)

Relative stereochemistry.



RN 148352-34-5 HCAPLUS
 CN Cyclopropane, 1,1-dibromo-2-iodo-2,3-dimethyl-, trans- (9CI) (CA INDEX
 NAME)

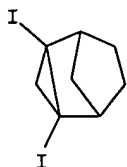
Relative stereochemistry.



L42 ANSWER 8 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1993:408389 HCAPLUS
 DN 119:8389
 ED Entered STN: 10 Jul 1993
 TI Synthesis and chemistry of some tricyclic cyclopropenes. 3.
 Tricyclo[3.2.1.0^{2,4}]oct-2(4)-ene. [Erratum to document cited in
 CA117(19):191377v]
 AU Chenier, Philip J.; Bauer, Michael J.; Hodge, Christina L.
 CS Dep. Chem., Univ. Wisconsin, Eau Claire, WI, 54702-4004, USA
 SO Journal of Organic Chemistry (1993), 58(11), 3222
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA English
 CC 24-8 (Alicyclic Compounds)
 Section cross-reference(s): 22
 AB An error in the text has been corrected The error was not reflected in the
 abstract or the index entries.
 ST erratum cyclopropanation chloromethylbicycloheptanedicarboxylate;
 cyclopropanation chloromethylbicycloheptanedicarboxylate erratum;
 bicycloheptanedicarboxylate chloromethyl cyclopropanation erratum;
 dehalogenation iodotricyclooctane erratum; bromotricyclooctane
 dehalogenation erratum
 IT Regiochemistry
 (of dehalogenation of dihalotricyclo[3.2.1.0^{2,4}]octane (Erratum))
 IT Ring closure and formation
 (cyclopropanation, of (chloromethyl)bicycloheptanedicarboxylate

- (Erratum))
- IT Debromination
(regioselective, of dibromotricyclo[3.2.1.02,4]octane (Erratum))
- IT Dechlorination
(regioselective, of dichlorotricyclo[3.2.1.02,4]octane (Erratum))
- IT Dehalogenation
(regioselective, of dihalotricyclo[3.2.1.02,4]octane (Erratum))
- IT 542-92-7, 1,3-Cyclopentadiene, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(Diels-Alder reaction of, with (chloromethyl)maleic anhydride (Erratum))
- IT 41702-49-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(Diels-Alder reaction of, with cyclopentadiene (Erratum))
- IT 7726-95-6, Bromine, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(debromination, regioselective, of dibromotricyclo[3.2.1.02,4]octane (Erratum))
- IT 7782-50-5, Chlorine, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(dechlorination, regioselective, of dichlorotricyclo[3.2.1.02,4]octane (Erratum))
- IT 122145-03-3, Tricyclo[3.2.2.02,4]non-2(4)-ene
RL: RCT (Reactant); RACT (Reactant or reagent)
(decomposition of (Erratum))
- IT 143668-20-6P, Tricyclo[3.2.1.02,4]oct-2(4)-ene
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(formation and decomposition of (Erratum))
- IT 143668-31-9P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in debromination of dibromotricyclo[3.2.1.02,4]octane (Erratum))
- IT 143668-28-4P 143668-29-5P 143668-30-8P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in debromination of dibromotricyclo[3.2.1.02,4]octane with tert-butyllithium (Erratum))
- IT 143729-90-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclopropanation of (Erratum))
- IT 143668-26-2P 143668-27-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and dehalogenation of (Erratum))
- IT 143668-25-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and halogenation of (Erratum))
- IT 143668-23-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and isomerization of (Erratum))
- IT 143668-21-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction of (Erratum))
- IT 143668-22-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and ring opening/esterification of (Erratum))
- IT 143668-24-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and saponification of (Erratum))
- IT 5471-63-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of (Erratum))

IT 143680-78-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, by decomposition of Tricyclo[3.2.1.02,4]octene (Erratum))
 IT 1159-86-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, by decomposition of tricyclo[3.2.1.02,4]octene (Erratum))
 IT 143668-27-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and dehalogenation of (Erratum))
 RN 143668-27-3 HCAPLUS
 CN Tricyclo[3.2.1.02,4]octane, 2,4-diiodo-, (1 α ,2 β ,4 β ,5.alpha
 .)- (9CI) (CA INDEX NAME)



L42 ANSWER 9 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1992:591377 HCAPLUS
 DN 117:191377
 ED Entered STN: 15 Nov 1992
 TI Synthesis and chemistry of some tricyclic cyclopropenes. 3.
 Tricyclo[3.2.1.02,4]oct-2(4)-ene
 AU Chenier, Philip J.; Bauer, Michael J.; Hodge, Christina L.
 CS Dep. Chem., Univ. Wisconsin, Eau Claire, WI, 54702-4004, USA
 SO Journal of Organic Chemistry (1992), 57(22), 5959-62
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA English
 CC 24-8 (Alicyclic Compounds)
 Section cross-reference(s): 22
 OS CASREACT 117:191377
 GI



AB The title compound cyclopropene (I) was synthesized in situ by
 dehalogenation of a dibromide and diiodide precursor with
 tert-butyllithium in THF at -78°C. The dihalides were formed in
 six steps starting with cyclopentadiene and (chloromethyl)maleic
 anhydride. In the presence of diphenylisobenzofuran (DPIBF) I forms a
 Diels-Alder adduct. Cyclopropene I and a previously synthesized
 cyclopropene (II) were decomposed under these same conditions, only without
 DPIBF present, to give complex mixts. of products, some of which were
 characterized as tert-Bu adducts and dimers via the ene reaction of the
 cyclopropenes.
 ST cyclopropanation chloromethylbicycloheptanedicarboxylate;
 bicycloheptanedicarboxylate chloromethyl cyclopropanation; dehalogenation
 iodotricyclooctane; bromotricyclooctane dehalogenation
 IT Regiochemistry
 (of dehalogenation of dihalotricyclo[3.2.1.02,4]octane)
 IT Ring closure and formation

(cyclopropanation, of (chloromethyl)bicycloheptanedicarboxylate)

IT Debromination
(regioselective, of dibromotricyclo[3.2.1.02,4]octane)

IT Dechlorination
(regioselective, of dichlorotricyclo[3.2.1.02,4]octane)

IT Dehalogenation
(regioselective, of dihalotricyclo[3.2.1.02,4]octane)

IT 542-92-7, Cyclopentadiene, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(Diels-Alder reaction of, with (chloromethyl)maleic anhydride)

IT 41702-49-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(Diels-Alder reaction of, with cyclopentadiene)

IT 7726-95-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(debromination, regioselective, of dibromotricyclo[3.2.1.02,4]octane)

IT 7782-50-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(dechlorination, regioselective, of dichlorotricyclo[3.2.1.02,4]octane)

IT 122145-03-3, Tricyclo[3.2.2.02,4]non-2(4)-ene
RL: RCT (Reactant); RACT (Reactant or reagent)
(decomposition of)

IT 143668-20-6P, Tricyclo[3.2.1.02,4]oct-2(4)-ene
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(formation and decomposition of)

IT 143668-31-9P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in debromination of dibromotricyclo[3.2.1.02,4]octane)

IT 143668-28-4P 143668-29-5P 143668-30-8P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in debromination of dibromotricyclo[3.2.1.02,4]octane
with tert-butyllithium)

IT 143729-90-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and cyclopropanation of)

IT 143668-26-2P 143668-27-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and dehalogenation of)

IT 143668-25-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and halogenation of)

IT 143668-23-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and isomerization of)

IT 143668-21-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reduction of)

IT 143668-22-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and ring opening/esterification of)

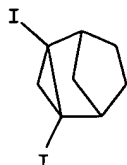
IT 143668-24-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and saponification of)

IT 5471-63-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT 143680-78-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by decomposition of Tricyclo[3.2.1.02,4]octene)

IT 1159-86-0P

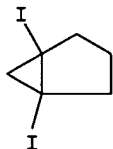
RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, by decomposition of tricyclo[3.2.1.0^{2,4}]octene)
 IT 143668-27-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and dehalogenation of)
 RN 143668-27-3 HCAPLUS
 CN Tricyclo[3.2.1.0^{2,4}]octane, 2,4-diiodo-, (1 α ,2 β ,4 β ,5.alpha
 .)- (9CI) (CA INDEX NAME)



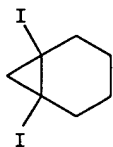
L42 ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1992:20705 HCAPLUS
 DN 116:20705
 ED Entered STN: 24 Jan 1992
 TI 1,2-Bridged cyclopropenes
 AU Wiberg, Kenneth B.; Artis, Dean R.; Bonneville, G.
 CS Dep. Chem., Yale Univ., New Haven, CT, 06511, USA
 SO Journal of the American Chemical Society (1991), 113(21),
 7969-79
 CODEN: JACSAT; ISSN: 0002-7863
 DT Journal
 LA English
 CC 24-7 (Alicyclic Compounds)
 Section cross-reference(s): 22
 GI For diagram(s), see printed CA Issue.
 AB The dehalogenations of 1,5-dihalobicyclo[3.1.0]hexanes I (R = Br, iodo)
 and 1,6-dihalobicyclo[4.1.0]heptanes II (R = Br, iodo) have been studied
 in solution and in the gas phase. The solution reactions led to the formation
 of bicyclo[3.1.0]hex-1(5)ene (III) and bicyclo[4.1.0]hept-1(6)-ene (IV)
 resp., but this was followed by rapid ene reactions forming dimers, which
 then coupled to form tetramers. The cyclopropenes could be trapped as
 Diels-Alder adducts. In the gas phase, by use of either potassium atoms
 or solid methyllithium, the products of thermal ring opening,
 methylenecyclopentene and methylenecyclohexene, were formed. A set of
 theor. calcns. was carried out dealing with the strain energies, inversion
 barriers, bond properties, and atom properties of bicyclo[1.1.0]but-1(3)-
 ene (V), bicyclo[2.1.0]pent-1(4)-ene (VI), and the cyclopropenes from the
 exptl. study. Whereas bicyclohexene and bicycloheptene appear to be
 fairly normal compds. except for their high strain energies,
 bicyclopentene may be a transition state for the carbon scrambling of
 methylenecyclobutylidene, and bicyclobutene has an unusual structure and
 charge-d. distribution.
 ST bridged cyclopropene prepn ene theor property
 IT Molecular orbital
 (of bicyclobutene, bicyclopentene, and cyclopropenes)
 IT Bond angle
 Heat of formation
 (of bridged and unbridged cyclopropenes)
 IT Dehalogenation
 (of dihalobicycloalkanes, generation of bridged cyclopropenes by)
 IT Potential energy and function
 (strain, of bridged and unbridged cyclopropenes)
 IT Energy level
 (vibrational, of bridged and unbridged cyclopropenes)
 IT 41702-49-2

- RL: RCT (Reactant); RACT (Reactant or reagent)
(Diels-Alder reaction of, with in situ generated butadiene)
- IT 5471-63-6, 1,3-Diphenylisobenzofuran
RL: RCT (Reactant); RACT (Reactant or reagent)
(Diels-Alder reaction of, with in situ generated cyclopropenes)
- IT 27538-13-2 74-82-8P, Methane, preparation 74-84-0P, Ethane, preparation 74-98-6P, Propane, preparation 106-97-8P, Butane, preparation
RL: PRP (Properties)
(MO energies of)
- IT 2781-85-3P, Cyclopropene 58208-49-4P, Bicyclo[1.1.0]but-1(3)-ene 66235-52-7P, Bicyclo[2.1.0]pent-1(4)-ene 66235-53-8P, Bicyclo[3.1.0]hex-1(5)-ene 66235-54-9P, Bicyclo[4.1.0]hept-1(6)-ene
RL: PREP (Preparation)
(MO energies, heat of formation, strain energies, vibrational frequency and bond angles of)
- IT 75-19-4, Cyclopropane
RL: RCT (Reactant); RACT (Reactant or reagent)
(bond angles of)
- IT 699-49-0 699-50-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(decarboxylation-bromination of)
- IT 286-08-8P, Norcarane 1888-90-0P, 3-Methylenecyclohexene
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in gas-phase reaction of dihalobicycloheptane with potassium)
- IT 285-58-5P, Bicyclo[3.1.0]hexane 930-26-7P, 3-Methylenecyclopentene
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in gas-phase reaction of dihalobicyclohexanes with potassium)
- IT 137648-81-8P 137648-82-9P 137648-83-0P 137764-37-5P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in reaction of diiodobicyclohexane with methyllithium)
- IT 77-79-2P, 3-Sulfolene
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(generation of butadiene and Diels-Alder reaction of, with (chloromethyl)maleic anhydride)
- IT 85739-39-5P 85739-40-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and Me esterification of)
- IT 2958-66-9P, Bicyclo[3.1.0]hexane-1,5-dicarboxylic acid 85739-45-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and decarboxylation-halogenation of)
- IT 137648-72-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenation of)
- IT 85750-78-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and intramol. cyclocondensation of)
- IT 85739-44-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and methanolysis-Me esterification of)
- IT 137648-70-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with methyllithium)
- IT 3037-78-3P 103478-30-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and saponification of)
- IT 85739-32-8P 85739-33-9P 85739-36-2P 85739-37-3P 85739-38-4P 85739-42-0P 135663-39-7P 135663-40-0P 135695-40-8P 137648-73-8P

137648-74-9P 137648-75-0P 137648-76-1P 137648-77-2P 137648-78-3P
 137648-79-4P 137648-80-7P 137764-35-3P 137764-36-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 IT 14309-32-1P, 1,2-Dimethylcyclopropene
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, MO energies, heat of formation, strained energy, and
 vibrational frequency of)
 IT 85739-31-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, reductive debromination-generation of alkene and Diels-Alder
 reaction of, with diphenylisobenzofuran)
 IT 85739-35-1P 137648-71-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, reductive debromination-generation of alkene and reactions of)
 IT 85739-34-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, reductive debromination-generation of alkene, and reactions
 of)
 IT 62638-06-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (sequential lithiation, amination, and intramol. cyclocondensation of)
 IT 137648-70-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and reaction of, with methyllithium)
 RN 137648-70-5 HCAPLUS
 CN Bicyclo[3.1.0]hexane, 1,5-diiodo- (9CI) (CA INDEX NAME)



IT 137648-71-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, reductive debromination-generation of alkene and reactions of)
 RN 137648-71-6 HCAPLUS
 CN Bicyclo[4.1.0]heptane, 1,6-diiodo- (9CI) (CA INDEX NAME)



L42 ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1986:625635 HCAPLUS
 DN 105:225635
 ED Entered STN: 26 Dec 1986
 TI Vibrational spectra and structure of halogen-substituted cyclopropanes.
 III. Cis- and trans-1,2-diiodocyclopropane
 AU Schrupf, G.
 CS Inst. Org. Chem., Univ. Goettingen, Goettingen, D-3400, Fed. Rep. Ger.
 SO Journal of Raman Spectroscopy (1986), 17(2), 183-7
 CODEN: JRSPAF; ISSN: 0377-0486
 DT Journal
 LA English

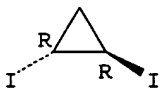
CC 22-9 (Physical Organic Chemistry)
 AB The IR spectra of liquid cis- and trans-1,2-diiodocyclopropane were measured from 4000 to 200 cm⁻¹. Raman spectra between 4000 and 50 cm⁻¹ of the two compds. as liqs. and of the solid cis isomer were also obtained. All of the 21 normal vibrations of the two mols. were convincingly assigned on the basis of Raman depolarization ratios and group frequency correlations. Comparisons are made with the normal modes of related compds. There is excellent agreement with those assignments previously proposed for the two isomers of 1,2-dibromocyclopropane, cis-1,2-dichloropropane and related modes of iodocyclopropane.
 ST IR diiodocyclopropane Raman; normal vibration diiodocyclopropane
 IT Infrared spectra
 Raman spectra
 (of diiodocyclopropane isomers)
 IT Molecular vibration
 (of diiodocyclopropanes, normal coordinate anal. of)
 IT 105285-96-9 105285-97-0
 RL: PROC (Process)
 (vibrational anal. of)
 IT 105285-96-9 105285-97-0
 RL: PROC (Process)
 (vibrational anal. of)
 RN 105285-96-9 HCAPLUS
 CN Cyclopropane, 1,2-diiodo-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

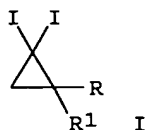


RN 105285-97-0 HCAPLUS
 CN Cyclopropane, 1,2-diiodo-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

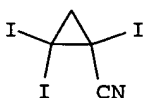
Relative stereochemistry.



L42 ANSWER 12 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1986:497027 HCAPLUS
 DN 105:97027
 ED Entered STN: 19 Sep 1986
 TI Formation of diiodocyclopropanes from electron-poor alkenes
 AU Baird, Mark S.; Gerrard, Michele E.
 CS Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU, UK
 SO Journal of Chemical Research, Synopses (1986), (3), 114-15
 CODEN: JRPSDC; ISSN: 0308-2342
 DT Journal
 LA English
 CC 24-2 (Alicyclic Compounds)
 Section cross-reference(s): 23
 OS CASREACT 105:97027
 GI

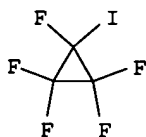


- AB The base-induced reactions of CHI₃ with electron-deficient alkenes were examined under phase-transfer-catalyzed conditions. Thus, treatment of CH₂:CMeR (R = CN, CO₂Me) with CHI₃ in H₂O-CH₂Cl₂ in the presence of PhCH₂N+Et₃.Cl⁻ for 12 and 3 h at 20°, resp., gave the corresponding diiodocyclopropanes I (R = CN, CO₂Me, R₁ = Me) in 58 and 42% yield, resp. Similar treatment of CH₂:CHR (R = CN, CO₂Et) for 1 h gave the corresponding I (R = CN, CO₂Et, R₁ = H) in 48 and 57% yield, resp.
- ST iodocyclopropane; cyclopropane diiodo; iodoform reaction electron deficient alkene
- IT Ring closure and formation
(of iodoform with electron-deficient alkenes, diiodocyclopropanes by phase transfer-catalyzed)
- IT 513-92-8P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in reaction of iodoform with electron-deficient alkenes)
- IT 103867-98-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(ozonolysis and oxidation of)
- IT 103867-92-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(ozonolysis of)
- IT 84060-85-5P 103867-93-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)
- IT 103867-91-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and methylation of)
- IT 103867-94-3P 103867-95-4P 103867-96-5P 103867-97-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
- IT 75-47-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(ring closure reaction of, with electron-deficient alkenes, phase transfer-catalyzed)
- IT 80-62-6 107-13-1, reactions 126-98-7 140-88-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(ring closure reaction of, with iodoform, phase transfer-catalyzed)
- IT 103867-96-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
- RN 103867-96-5 HCAPLUS
- CN Cyclopropanecarbonitrile, 1,2,2-triiodo- (9CI) (CA INDEX NAME)



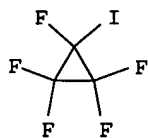
L42 ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1979:136877 HCAPLUS
DN 90:136877
ED Entered STN: 12 May 1984

TI Signs of two- and three-bond coupling constants in pentafluorocyclopropanes and their possible origins
 AU Barlow, M. G.; Fields, R.; Temme, F. P.
 CS Dep. Chem., Univ. Manchester Inst. Sci. Technol., Manchester, UK
 SO Spectrochimica Acta, Part A: Molecular and Biomolecular Spectroscopy (1978), 34A(6), 613-16
 CODEN: SAMCAS; ISSN: 0370-8322
 DT Journal
 LA English
 CC 22-2 (Physical Organic Chemistry)
 AB The nuclear spin-coupling consts. of ^{19}F over 2 and 3 bonds in pentafluorocyclopropane and its Cl, Br and iodo derivs. were determined by a double-resonance technique. The signs and magnitudes of these consts. are discussed in terms of the theor. Fermi-contact, orbital and spin-dipolar contributions. Semiempirical correlation of the 2- and 3-bond coupling consts. with the elec.-field term provides some rationalization of their signs within the CF_2CF_2 fragment, where the different types of elec.-field-term dependence suggest that while the cis 3-bond coupling is dominated by the orbital term, the variation in trans 3-bond coupling is attributable to changes in the spin-dipolar term. The orbital term also appears to dominate the 3-bond coupling within the $\text{CF}_2\text{-CF}$ fragment, being the most substituent-sensitive, and possibly provides a major contribution to the coupling mechanism.
 ST fluorine long range coupling; spin coupling pentafluorocyclopropane; fluorocyclopropane long range coupling; chloropentafluorocyclopropane spin coupling; bromopentafluorocyclopropane spin coupling; iodopentafluorocyclopropane spin coupling
 IT Spin, nuclear coupling
 (long-range, of fluorine, in pentafluorocyclopropane and its halo-derivs.)
 IT 695-52-3 872-58-2 22485-43-4 22485-44-5
 RL: PRP (Properties)
 (nuclear spin-spin coupling of fluorine-19 in, long-range)
 IT 7782-41-4, properties
 RL: PRP (Properties)
 (nuclear spin-spin coupling of, in pentafluorocyclopropane and its halo-derivs., long-range)
 IT 22485-44-5
 RL: PRP (Properties)
 (nuclear spin-spin coupling of fluorine-19 in, long-range)
 RN 22485-44-5 HCAPLUS
 CN Cyclopropane, pentafluoroiodo- (8CI, 9CI) (CA INDEX NAME)



L42 ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1974:3136 HCAPLUS
 DN 80:3136
 ED Entered STN: 12 May 1984
 TI Cyclopropane chemistry. III. Thermal decomposition of halopoly(fluoro)cyclopropanes
 AU Birchall, J. Michael; Fields, Roy; Haszeldine, Robert N.; Kendall, Norman T.
 CS Dep. Chem., Univ. Manch. Inst. Sci. Technol., Manchester, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1973), (16), 1773-9
 CODEN: JCPRB4; ISSN: 0300-922X
 DT Journal
 LA English

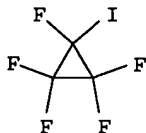
CC 24-2 (Alicyclic Compounds)
 GI For diagram(s), see printed CA Issue.
 AB Pyrolysis of the cyclopropanes (I, R = H and CF₃) and 1,1-dichlorotrifluoro(trifluoromethyl)cyclopropane proceeded only by elimination of F₂C:. 1,1,2-Trifluoro-2-(trifluoromethyl)cyclopropane underwent exclusive rearrangement to F₃CCF:CHCHF₂. I (R = Br, iodo) and 1,2-dichlorotetrafluoro- and 1-chloro-1,2,2,3-tetrafluorocyclopropane showed both types of behavior.
 ST thermal decompn fluorocyclopropane; cyclopropane fluoro thermal decompn
 IT Carbenes (methylene derivatives)
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (insertion reactions of)
 IT 311-81-9 359-37-5 381-71-5 598-73-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (insertion reaction with difluorocarbene)
 IT 661-45-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (insertion reaction with haloethenes)
 IT 49776-46-7P 49852-49-5P 49852-50-8P 49852-51-9P 49852-57-5P
 50678-66-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 IT 1840-40-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with hexafluoropropene)
 IT 116-15-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with trifluoro(trichloromethyl)silane)
 IT 379-16-8 380-51-8 872-58-2 22430-74-6 22430-75-7 22430-76-8
 22430-77-9 22485-43-4 22485-44-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (thermal decomposition of, mechanism of)
 IT 74-85-1, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (with hexafluoropropene)
 IT 22485-44-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (thermal decomposition of, mechanism of)
 RN 22485-44-5 HCAPLUS
 CN Cyclopropane, pentafluoroiodo- (8CI, 9CI) . (CA INDEX NAME)



L42 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1969:46649 HCAPLUS
 DN 70:46649
 ED Entered STN: 12 May 1984
 TI Fluorine-fluorine coupling constants in halopentafluorocyclopropanes: vicinal couplings of either sign
 AU Barlow, M. G.; Fields, Roy; Temme, F. P.
 CS Univ. Manchester Inst. Sci. Technol., Manchester, UK
 SO Chemical Communications (London) (1968), (24), 1671-2
 CODEN: CCOMA8; ISSN: 0009-241X
 DT Journal
 LA English
 CC 22 (Physical Organic Chemistry)
 AB 1 - (X - Substituted)-pentafluorocyclopropanes give rise to AA'BB'X spectra in which the AA'BB' portion arising from the geminal F nuclei is dominated by the geminal coupling JAB, which is more than an order of

magnitude larger than the other couplings. It is assumed to be pos. All the vicinal F-F couplings are substantial and depend on the nature and relative position of X. JAA' changes sign when X changes from Br to I. The cis couplings show similar trends to larger pos. values as X becomes more electroneg. Similarly the neg. trans coupling JAX tends to larger absolute values with increased electronegativity of X, while JAB' tends to increase as the electronegativity of X decreases.

ST fluoro cyclopropanes NMR; cyclopropanes fluoro NMR; NMR fluoro cyclopropanes
 IT Spin, nuclear
 (-spin coupling, of fluorine atoms in halopentafluorocyclopropanes)
 IT 931-91-9
 RL: PRP (Properties)
 (nuclear magnetic resonance of fluorine in)
 IT 695-52-3 22485-43-4 22485-44-5
 RL: PRP (Properties)
 (nuclear spin-spin coupling between fluorine atoms in)
 IT 7782-41-4, properties
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (nuclear spin-spin coupling of, in halopentafluorocyclopropanes)
 IT 22485-44-5
 RL: PRP (Properties)
 (nuclear spin-spin coupling between fluorine atoms in)
 RN 22485-44-5 HCAPLUS
 CN Cyclopropane, pentafluoroiodo- (8CI, 9CI) (CA INDEX NAME)



L42 ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1968:25302 HCAPLUS
 DN 68:25302
 ED Entered STN: 12 May 1984
 TI Fluorine-19 coupling constants and chemical shifts in trifluorocyclopropanes
 AU Williamson, Kenneth Lee; Braman, Beverly A.
 CS Mount Holyoke Coll., South Hadley, MA, USA
 SO Journal of the American Chemical Society (1967), 89(24), 6183-6
 CODEN: JACSAT; ISSN: 0002-7863
 DT Journal
 LA English
 CC 73 (Spectra and Other Optical Properties)
 AB The chloro, bromo, and iodo derivs. of 1,1-dichloro-2,2,3-trifluorocyclopropane have been synthesized and the ¹⁹F chemical shifts and coupling consts. have been determined. The vicinal and geminal couplings have been shown, by frequency sweep double resonance, to be of opposite sign. Relative chemical shifts for the geminal F atoms have been calculated. A linear correlation between the coupling consts. and the substituent electronegativity has been noted in which J_{trans} is much more sensitive to changes in electroneg. substituents than is J_{cis}. No obvious correlation between vicinal J_{FF} and dihedral angle is found. 32 references.
 ST FLUOROCYCLOPROPANES F NMR; CYCLOPROPANES FLUORINATED F NMR
 IT Spin, nuclear
 (-spin coupling, of fluorine in trifluorocyclopropane derivs.)
 IT Substituents
 (nuclear spin-spin coupling of fluorine in relation to electronegativity of, in trifluorocyclopropane derivs.)
 IT Electronegativity
 (nuclear spin-spin coupling of fluorine in relation to, of substituents in trifluorocyclopropane derivs.)

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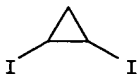
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L43 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 19533-52-9 REGISTRY
ED Entered STN: 16 Nov 1984
CN Cyclopropane, 1,2-diiodo- (6CI, 8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C3 H4 I2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)



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2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 55:37793

REFERENCE 2: 24:16890

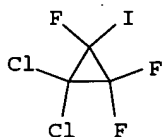
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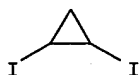
IT Nuclear magnetic resonance
 (of fluorine, in trifluorocyclopropane derivs.)
 IT 17371-07-2 17371-08-3 17371-09-4
 RL: PRP (Properties)
 (nuclear magnetic resonance of fluorine in, nuclear spin-spin coupling
 in)
 IT 7782-41-4, properties
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (nuclear spin-spin coupling of, in trifluorocyclopropane derivs.)
 IT 17371-09-4
 RL: PRP (Properties)
 (nuclear magnetic resonance of fluorine in, nuclear spin-spin coupling
 in)
 RN 17371-09-4 HCAPLUS
 CN Cyclopropane, 1,1-dichloro-2-iodo-2,3,3-trifluoro- (8CI) (CA INDEX NAME)



L42 ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1961:37793 HCAPLUS
 DN 55:37793
 OREF 55:7310d-1,7311a
 ED Entered STN: 22 Apr 2001
 TI Cyclopropene. V. Some reactions of cyclopropene
 AU Wiberg, Kenneth B.; Bartley, William J.
 CS Univ. of Washington, Seattle
 SO Journal of the American Chemical Society (1960), 82, 6375-80
 CODEN: JACSAT; ISSN: 0002-7863
 DT Journal
 LA Unavailable
 CC 10D (Organic Chemistry: Alicyclic Compounds)
 OS CASREACT 55:37793
 AB cf. CA 52, 16241c. A number of reactions of cyclopropene (I) was investigated. The heat of formation of I, estimated on the results of this study, was 47.7 kcal./mole. Cyclopropanecarboxylic acid (43 g.) and then 36 g. NaN₃ added during 1 hr. with stirring in small portions to 500 cc. CHCl₃ and 100 cc. concentrated H₂SO₄, stirred 5-8 hrs. at 50-5°, and poured onto ice, the aqueous layer basified with concentrated aqueous KOH and steam distilled into a small excess of 6N HCl, and the acid solution evaporated in vacuo gave 28-35.5 g. cyclopropylamine-HCl which was converted in the usual manner to I. When the cyclopropyltrimethylammonium hydroxide was equilibrated with D₂O and then pyrolyzed, the resulting I contained 40% I-d₂, 40% I-d₁, and 20% I-d₀. I and He (1:5) slowly swept with He during 10-30 min. through a tube packed with glass helices at 325° gave only a small amount of MeC.tplbond.CH; at 425° the product contained up to 80% MeC.tplbond.CH; the conversion depended on the contact time. I and N slowly passed into 3.5 g. cyclopentadiene in 50 cc. CH₂Cl₂ at 0° and evaporated, and the residue purified by vapor chromatography gave 5.4 g. 1:1 adduct, m. 30-2°. I and N passed at room temperature into 3.2 g. (CH₂:CH)₂ at room temperature, kept 5 hrs., and evaporated, and the residue purified by vapor chromatography yielded 2.0 g. 1:1 adduct, b. 106-9°, n_{25D} 1.4749. I and N passed at 0° into Br-CCl₄ and distilled gave 57% dibromide (II) of I, b₂₇ 40-50°, n_{25D} 1.5301. I added at room temperature to iodine-CCl₄ gave 64% diiodide of I, b₁ 45-7°, n_{25D} 1.6738. The Grignard reagent from 5 g. II, 1.22 g. Mg, and 20 cc. dry Et₂O treated dropwise with 2 cc. D₂O gave 10% cyclopropane (III) containing 86% III-d₂, 8% III-d₁, and 6% III-d₀. The Grignard reagent from 11 g. II and 2.9 g. Mg in 40 cc. Et₂O treated with stirring with dry CO₂ and worked up, and the resulting acid refluxed 3 hrs. with 50 cc. absolute

EtOH and a few drops concentrated HCl yielded di-Et cis-cyclopropane-1,2-dicarboxylate. I passed into 30% aqueous AgNO₃ or into ammoniacal AgNO₃ gave a black precipitate of an argentic complex which was soluble in 30% HClO₄. Ph₂CN₂ from 2.5 g. Ph₂C:NNH₂ in 50 cc. CH₂Cl₂ and 0.5 g. Cu powder treated at liquid N temperature with about 1 g. I, kept 1.5 hrs. at -78° with occasional shaking, warmed to room temperature, and evaporated gave 1 g. 1:1 adduct, yellow-tan needles, m. 119-21°, which oxidized gave Bz₂CO. N₂CHCO₂Et (3.0 g.) in 10 cc. CH₂Cl₂ treated at liquid N temperature with 1.5 cc. I gave 1.5 g. 1:1 adduct, b_{0.4} 90-100°, and some higher boiling material. Cyclopropyldimethylamine (IV) (8.5 g.) added with stirring below 10° to 25 cc. 30% H₂O₂ in 50 cc. H₂O, stirred overnight at room temperature, treated with a small amount of platinized asbestos, concentrated to about 15 cc. in vacuo, and pyrolyzed at 320°, the product swept with N into 10% HCl, and the aqueous solution basified with KOH gave 2.0 g. IV; no I was found.

- IT Diels-Alder reaction
- Halogenation
- Heat of formation
- Isomerization
 - (of cyclopropene)
- IT Silver, compound with cyclopropene
- IT 2781-85-3, Cyclopropene
 - (and derivs.)
- IT 74-99-7, Propyne
 - (formation of, from cyclopropene)
- IT 657-23-8, Tricyclo[3.2.1.0^{2,4}]oct-6-ene 710-43-0, 1,2-Cyclopropanedicarboxylic acid, cis-, diethyl ester 16554-83-9, 3-Norcarene 16837-83-5, Cyclopropane, 1,2-dibromo-, trans- 16837-85-7, Cyclopropene-d₂ 19533-52-9, Cyclopropane, 1,2-diiodo- 76936-98-6, Cyclopropane-d 98334-65-7, 3-Pyridazinecarboxylic acid, 3,4-dihydro-(?), ethyl ester 117882-25-4, Cyclopropene-d 122211-66-9, Cyclopropane-1,2-d₂, cis- 132981-80-7, Pyridazine, 3,4-dihydro-3,3-diphenyl-(?)
 - (preparation of)
- IT 623-73-4, Acetic acid, diazo-, ethyl ester 883-40-9, Methane, diazodiphenyl-
 - (reaction with cyclopropene)
- IT 19533-52-9, Cyclopropane, 1,2-diiodo-
 - (preparation of)
- RN 19533-52-9 HCAPLUS
- CN Cyclopropane, 1,2-diiodo- (6CI, 8CI) (CA INDEX NAME)



- L42 ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 1961:37792 HCAPLUS
- DN 55:37792
- OREF 55:7309f-1,7310a-d
- ED Entered STN: 22 Apr 2001
- TI Chemistry of spiropentane. III. The synthesis and deamination of spiropentylamine
- AU Applequist, Douglas E.; Fanta, George F.
- CS Univ. of Illinois, Urbana
- SO Journal of the American Chemical Society (1960), 82, 6393-7
- CODEN: JACSAT; ISSN: 0002-7863
- DT Journal
- LA Unavailable
- CC 10D (Organic Chemistry: Alicyclic Compounds)
- AB cf. CA 53, 21701a. Spiropentylamine (I) was synthesized from the Grignard reagent of chlorospiropentane (II) with ClCO₂Et (III), followed by a Curtius degradation. I with aqueous HNO₂ yielded a mixture of 2(IV) and

3-methylenecyclobutanol (V). The implications of these results with regard to the structure of nonclassical carbonium ions were discussed. II (1.8 g.) added at -76° to 0.3 g. Li in tetrahydrofuran, the mixture stirred 22 hrs. at -76° then 5.25 hrs. at -45 to -50° , treated with 1-C10H7NCO in 10 cc. tetrahydrofuran, kept 19 hrs. at room temperature, and bubbled with He which was passed into a cold trap gave 32% spiropentane; the residual mixture poured into 200 cc. iced H₂O, concentrated to near dryness, filtered, and the residue extracted with ligroine (b. $60-8^{\circ}$) left 1.58 g. brown insol. powder; the ligroine solution chromatographed on Florisil gave 93 mg. solid, m. $158-9^{\circ}$, which showed an infrared spectrum similar to that of (1-C10H7)₂. II (10.57 g.) and 7.7 cc. EtBr in 35 cc. tetrahydrofuran added under N to 10.00 g. ground Mg, 20 cc. dry tetrahydrofuran, and a crystal of iodine, the mixture refluxed 7.3 hrs., cooled to room temperature, added during 2 hrs. with stirring at 0° to 39.3 cc. III in 100 cc. tetrahydrofuran under N, the mixture kept at room temperature overnight, and worked up gave 49.3% approx. 85%-pure Et spiropentanecarboxylate (VI), b₁₇ $61-9^{\circ}$. The Grignard reagent from a similar run in Et₂O treated with 1-C10H7NCO gave 6% N-(1-naphthyl)spiropentanecarboxamide, m. $167-9^{\circ}$ (chromatographed on Florisil) (C₆H₆-petr. ether). VI (7.25 g.) in 15 cc. absolute EtOH added dropwise with stirring to refluxing 85% N₂H₄.H₂O during 50 min., the mixture refluxed 2 hrs. with stirring, and evaporated gave 4.5 g. spiropentanecarboxylic acid hydrazide (VII), m. $115-17.5^{\circ}$ with softening at about 100° (C₆H₆). VII (2.929 g.) in 54 cc. H₂O treated with 13.5 cc. 6N HCl and 60 cc. 5:3 C₆H₆-heptane, the mixture cooled to -5 to -10° , treated with stirring during 20 min. with 3.00 g. NaNO₂ in 6 cc. H₂O, the organic phase dried, refluxed 5 hrs., treated with 8.65 g. 2-C10H7OH in 60 cc. hot C₆H₆ and 0.1 cc. 10% Et₃N in heptane, the mixture refluxed 91 hrs., evaporated, and the residue sublimed at about 60° in vacuo to remove excess 2-C10H7OH gave 3.992 g. 2-naphthyl spiropentylcarbamate (VIII), m. $117-18.5^{\circ}$ (C₆H₆-petr. ether); 0.434 g. 2nd crop. VIII (0.103 g.) and 5 cc. N NaOH shaken 47.5 hrs. at room temperature, acidified with 3N HClO₄, extracted with Et₂O to remove 56.0 mg. 2-C10H7OH, adjusted to pH 8, shaken about 1 hr. at room temperature with 0.49 ml. PhNCS, and worked up yielded 59.8 mg. (crude) 1-spiropentyl-3-phenyl-2-thiourea, m. $104-7^{\circ}$ (petr. ether). The attempted hydrolysis of II with moist Ag₂O was unsuccessful. II (66.4 mg.) refluxed 12.25 hrs. with 0.48 g. AgNO₃ in 8 cc. H₂O and kept 2 days at room temperature gave only about 3 mg. AgCl. VIII (2.004 g.) and 108 cc. N NaOH shaken 42 hrs., acidified with 3N HClO₄, washed with Et₂O, diluted to 200 cc. with H₂O, adjusted to pH 1.23 with HClO₄, treated with 2.202 g. NaNO₂ in 50 cc. H₂O, the mixture kept 41 hrs. at room temperature, and worked up with Et₂O gave 4.311 g. mixture of V and IV (32.5 and 6.7% yield, resp.) contaminated with about 3% of 2 minor components. V (70 mg.) in CCl₄ and Et₂O containing 48 mg. AcOH refluxed 55 min. with 0.394 g. 3,5-(O₂N)₂C₆H₃COCl and 1 cc. C₅H₅N, poured into iced H₂O, and the product isolated with Et₂O gave 76 mg. 3,5-dinitrobenzoate of V, m. $100-3.5^{\circ}$ (softening at 94°). The infrared absorption spectra of IV and V were recorded.

IT Infrared spectra
(of spiropentane derivs.)

IT Deamination
(of spiropentylamine)

IT Carbonium compounds
(structure of)

IT 157-40-4, Spiropentane
(chemistry of)

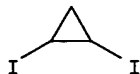
IT 17202-69-6, Spiropentanamine
(preparation and deamination of)

IT 6142-68-3, Spiropentanecarboxylic acid, ethyl ester 6142-69-4,
Spiropentanecarboxamide, N-1-naphthyl- 6142-70-7, Spiropentanecarboxylic
acid, hydrazide 6142-72-9, Urea, 1-phenyl-3-spiropentyl-2-thio-
41527-50-8, Cyclobutanol, 2-methylene- 68423-20-1, Cyclobutanol,
3-methylene- 104396-40-9, Cyclobutanol, 3-methylene-,
3,5-dinitrobenzoate 408331-01-1, 2-Naphthol, spiropentanecarbamate
408331-01-1, Spiropentanecarbamic acid, 2-naphthyl ester
(preparation of)

L42 ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1930:16890 HCAPLUS
DN 24:16890
OREF 24:1848c-i,1849a-c
ED Entered STN: 16 Dec 2001
TI Cyclopropene and some of its derivatives
AU Dem'Yanov, N. Ya.; Doyarenko, M. N.
SO Bull. acad. sci. union rep. soviet social., Classe sci, phys. math. (1929), (No. 7), 653-65
DT Journal
LA Unavailable
CC 10 (Organic Chemistry)
GI For diagram(s), see printed CA Issue.
AB cf. C. A. 17, 989; 18,974. The expts. were undertaken for the purpose of establishing the most favorable condition for the formation of cyclopropene (I) from the base (the hydroxide of $\text{CH}_2\text{CH}_2\text{CH.NMe}_3\text{I}$), to study the behavior of I on heating with Al_2O_3 and to prep. some new derivs. of I, such as glycol, cyclopropanone and diiodocyclopropane. D. and D. succeeded only in preparing the last-named compound. The application of Wagner's method for the preparation of glycols from unsatd. hydrocarbons resulted only in the formation of formic and other tarry acids. By the action of H_2O , PbO and $\text{Ag}_2\text{CO}_3 + \text{H}_2\text{O}$ on the dibromide of I only acrolein and polymers were obtained. The action of H_2O alone on the bromide at temps. up to 150° resulted in the formation of acrolein (an isomer of I). Above 150° a hard dark resin contg. O resulted. The mechanism of the acrolein formation may be presented as follows: Ingold (C. A. 13, 2016) claims to have obtained the semicarbazone of cyclopropanone, $\text{CH}_2\text{CH}_2\text{C:O}$, but did not isolate it in a free state. It appears that derivs. of cyclopropane contg. OH, CH_2 or CH , C, O which are attached through double bonds to the C atoms of the ring cannot exist, or exist only under special conditions and are less stable than the other derivs., such as the homologs, the halides, CO_2H acids, nitriles, etc. Exptl. part.-Ten expts. were performed to establish the influence of heat on the yield of I from the base. It was found that at higher temps. (actual temperature not given) the yield of I decreases while the formation of allylene increases. Thus at a lower temperature 43% of I and 2% of allylene are formed while at a higher temperature the amts. are 37 and 13%, resp. The action of H_2O on the dibromide of I. 0.5 g. dibromide and 5 cc H_2O were heated in a sealed tube at temps. varying from 105° to 165° . At 105° no reaction took place; at 120° 5%, 2.9% of Br reacted; at 155° the reaction was complete. The reaction products consisted of acrolein and a dark hard substance, insol. in Et_2O and EtOH , containing 70% C, 6.4% H and 17.6% O (by difference) which corresponds to $\text{C}_5\text{H}_6\text{O}$. The product was probably formed by condensation of acrolein; $2\text{C}_3\text{H}_4\text{O} - \text{H}_2\text{C} = \text{C}_6\text{H}_6\text{O}$. The action of H_2O in the presence of Ag_2CO_3 and PbO .-Twenty cc. H_2O , 3.35 g. dibromide and 1.5 mols. moist Ag_2CO_3 were heated in a sealed tube at $100-110^\circ$ for 20 hrs., 42% dibromide reacted. As with H_2O , acrolein and a polymer were formed. Fifteen cc. H_2O , 2g. dibromide and 3.3 g. PbO were heated in a sealed tube at $150-160^\circ$ for 4.25 hrs. The reaction products were the same as above. The diiodide of I. Six g. I in 3.5 cc. abs. EtOH was added to I (prepared from 11.5 g. dibromide, Zn dust and 57% EtOH) at 0° . 0.5 g. of the iodide, washed with a large amount of dilute NaOH , was obtained. The iodide decomps. on standing or heating. It was purified by distilling it with steam. I 86.17%, calcd. for $\text{C}_3\text{H}_4\text{I}_2$, 86.38; d_{40}^{20} 2.7537, d_{14}^{20} 2.725, n_{D14}^{20} 1.6765, mol. refraction, calculated 39.45, found 40.58, exaltation 1.13. It solidifies in liquid CO_2 and melts at -5° . The action of KMnO_4 on I.-I (prepared from the dibromide) was treated with 0.5% KMnO_4 solution in an ice bath. A volatile aldehyde was detected in the gaseous portion. The liquid portion contained HCO_2H and an unidentified tarry acid. No glycol was formed. The action of high temperature in the presence of Al_2O_3 .-I (prepared from the base and not freed from accompanying small amts. of allylene) was passed through a 35-cm. long glass tube containing 10 g. Al_2O_3 at a temperature of $245-55^\circ$ and $345-55^\circ$. The gaseous reaction products were treated with Br and a

bromide of the approx. compn. C₃H₆Br₂ was obtained. It was probably propylene dibromide, as propylene could have been formed from the admixed allylene. D. and D. therefore conclude that no appreciable isomerization of I to allylene took place. The liquid reaction products consisted of a volatile polymer of I, its analysis corresponding to C₃H₄, and a non-volatile more complex polymer.

IT Hydrolysis
(of 1,2-dibromocyclopropane)
IT Oxidation
(of cyclopropene)
IT 2781-85-3, Cyclopropene
(and derivs.)
IT 75-19-4, Cyclopropane 2781-85-3, Cyclopropene
(derivs.)
IT 19533-52-9, Cyclopropane, 1,2-diiodo- 31507-76-3, Ammonium,
cyclopropyltrimethyl-, hydroxide 52304-09-3, Capric acid, α-butyl-
60948-90-5, Caprylic acid, α-amyl- 60948-91-6, Caprylic acid,
α-hexyl- 104186-32-5, Pelargonic acid, α-amyl-
(preparation of)
IT 19533-50-7, Cyclopropane, 1,2-dibromo-
(reaction with water)
IT 19533-52-9, Cyclopropane, 1,2-diiodo-
(preparation of)
RN 19533-52-9 HCAPLUS
CN Cyclopropane, 1,2-diiodo- (6CI, 8CI) (CA INDEX NAME)



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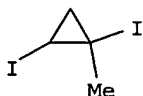
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L40 ANSWER 1 OF 1 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA55:7310d CAOLD
TI cyclopropene - (V) reactions of cyclopropene
AU Wiberg, Kenneth B.; Bartley, W. J.
IT 623-73-4 883-40-9 2781-85-3 16554-83-9 16837-85-7 19533-50-7
19533-52-9 20561-09-5 76936-98-6 98334-65-7 104396-40-9
116662-01-2 117882-25-4

L44 ANSWER 1 OF 9 USPATFULL on STN
 AN 2004:101633 USPATFULL
 TI Stable ethylene inhibiting compounds and methods for their preparation
 IN Jacobson, Richard Martin, Chalfont, PA, UNITED STATES
 Kelly, Martha Jean, Collegeville, PA, UNITED STATES
 James, William Nixon, JR., Hatfield, PA, UNITED STATES
 PI US2004077502 A1 20040422
 AI 2003US-0630282 A1 20030730 (10)
 PRAI 2002US-401308P 20020806 (60)
 DT Utility
 FS APPLICATION
 LREP Rohm and Haas Company, 100 Independence Mall West, Philadelphia, PA,
 19106
 CLMN Number of Claims: 8
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 617
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB A method to inhibit the ethylene response in plants with cyclopropene
 compounds by first generating stable cyclopropane precursor compounds
 and then converting these compounds to the gaseous cyclopropene
 antagonist compound by use of a reducing or nucleophilic agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 653605-61-9P
 (precursor and reduction with zinc; cyclopropene derivative as ethylene
 inhibiting compds.)
 RN 653605-61-9 USPATFULL
 CN Cyclopropane, 1,2-diiodo-1-methyl- (9CI) (CA INDEX NAME)



IT 653605-61-9P
 (precursor and reduction with zinc; cyclopropene derivative as ethylene
 inhibiting compds.)
 IT 105285-97-0P, trans-1,2-Diiodocyclopropane 653605-59-5P
 653605-60-8P
 (precursor; cyclopropene derivative as ethylene inhibiting compds.)

=> d bib abs hitstr l44 2-9

L44 ANSWER 2 OF 9 USPATFULL on STN
 AN 1998:14411 USPATFULL
 TI Fluoroiodocarbon blends as CFC and halon replacements
 IN Nimitz, Jonathan Shelley, Albuquerque, NM, United States
 Lankford, Lance Harrell, Newcastle, CA, United States
 PA Ikon Corporation, Carson City, NV, United States (U.S. corporation)
 PI US---5716549 19980210
 AI 1996US-0701669 19960822 (8)
 RLI Continuation of Ser. No. 1993US-0027227, filed on 5 Mar 1993, now
 patented, Pat. No. US---5611210
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Anthony, Joseph D.
 LREP Dinsmore & Shohl LLP
 CLMN Number of Claims: 40
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 1268
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A new set of effective, environmentally safe, nonflammable, low-toxicity refrigerants, solvents, foam blowing agents, propellants, and firefighting agents is disclosed. The agents are clean, electrically nonconductive, and have short atmospheric lifetimes, zero ozone-depletion potential, and low global warming potentials. The agents comprise at least one fluoriodocarbon agent satisfying the general formula C.sub.a H.sub.b Br.sub.c Cl.sub.d F.sub.e I.sub.f N.sub.g O.sub.h, wherein a is between and including 1 and 8; b is between and including 0 and 2; c, d, g, and h are each between and including 0 and 1; e is between and including 1 and 18; and f is between and including 1 and 2, either neat or mixed with additives selected from the group consisting of: alcohols, esters, ethers, fluoroethers, hydrocarbons, hydrofluorocarbons, and perfluorocarbons.

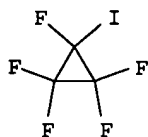
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 22485-44-5, Iodopentafluorocyclopropane

(fluoriodocarbon blends as CFC and Halon replacements)

RN 22485-44-5 USPATFULL

CN Cyclopropane, pentafluoriodo- (8CI, 9CI) (CA INDEX NAME)



L44 ANSWER 3 OF 9 USPATFULL on STN

AN 97:114860 USPATFULL

TI Fluoriodocarbon blends as CFC and halon replacements

IN Nimitz, Jonathan Shelly, Albuquerque, NM, United States

Lankford, Lance Harrell, Newcastle, CA, United States

PA Ikon Corporation, Carson City, NV, United States (U.S. corporation)

PI US---5695688 19971209

AI 1996US-0707960 19960910 (8)

RLI Division of Ser. No. 1995US-0414566, filed on 31 Mar 1995, now patented, Pat. No. US---5562861 which is a division of Ser. No. 1993US-0027227, filed on 5 Mar 1993, now patented, Pat. No. US---5611210

DT Utility

FS Granted

EXNAM Primary Examiner: Anthony, Joseph D.

LREP Dinsmore & Shohl LLP

CLMN Number of Claims: 18

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1116

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

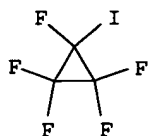
AB A new set of effective, environmentally safe, nonflammable, low-toxicity refrigerants, solvents, foam blowing agents, propellants, and firefighting agents is disclosed. The agents are clean, electrically nonconductive, and have short atmospheric lifetimes, zero ozone-depletion potential, and low global warming potentials. The agents comprise at least one fluoriodocarbon agent satisfying the general formula C.sub.a H.sub.b Br.sub.c Cl.sub.d F.sub.e I.sub.f N.sub.g O.sub.h, wherein a is between and including 1 and 8; b is between and including 0 and 2; c, d, g, and h are each between and including 0 and 1; e is between and including 1 and 18; and f is between and including 1 and 2, either neat or mixed with additives selected from the group consisting of: alcohols, esters, ethers, fluoroethers, hydrocarbons, hydrofluorocarbons, and perfluorocarbons.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 22485-44-5, Iodopentafluorocyclopropane

(fluoriodocarbon blends as CFC and Halon replacements)

RN 22485-44-5 USPATFULL
 CN Cyclopropane, pentafluoroiodo- (8CI, 9CI) (CA INDEX NAME)



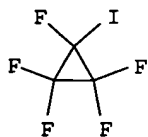
L44 ANSWER 4 OF 9 USPATFULL on STN
 AN 97:103950 USPATFULL
 TI Fluoriodocarbon blends as CFC and halon replacements
 IN Nimitz, Jonathan Shelley, Albuquerque, NM, United States
 Lankford, Lance Harrell, Newcastle, CA, United States
 PA Ikon Corporation, Carson City, NV, United States (U.S. corporation)
 PI US---5685915 19971111
 AI 1994US-0268587 19940630 (8)
 RLI Division of Ser. No. 1993US-0027227, filed on 5 Mar 1993, now patented,
 Pat. No. US---5611210
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Anthony, Joseph D.
 LREP Dinsmore & Shohl LLP
 CLMN Number of Claims: 32
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 1195

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A new set of effective, environmentally safe, nonflammable, low-toxicity refrigerants, solvents, foam blowing agents, propellants, and firefighting agents is disclosed. The agents are clean, electrically nonconductive, and have short atmospheric lifetimes, zero ozone-depletion potential, and low global warming potentials. The agents comprise at least one fluoriodocarbon agent satisfying the general formula C.sub.a H.sub.b Br.sub.c Cl.sub.d F.sub.e I.sub.f N.sub.g O.sub.h, wherein a is between and including 1 and 8; b is between and including 0 and 2; c, d, g, and h are each between and including 0 and 1; e is between and including 1 and 18; and f is between and including 1 and 2, either neat or mixed with additives selected from the group consisting of: alcohols, esters, ethers, fluoroethers, hydrocarbons, hydrofluorocarbons, and perfluorocarbons.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 22485-44-5, Iodopentafluorocyclopropane
 (fluoriodocarbon blends as CFC and Halon replacements)
 RN 22485-44-5 USPATFULL
 CN Cyclopropane, pentafluoroiodo- (8CI, 9CI) (CA INDEX NAME)



L44 ANSWER 5 OF 9 USPATFULL on STN
 AN 97:91124 USPATFULL
 TI Methods and compositions for sterilization of articles
 IN Nimitz, Jonathan Shelley, Albuquerque, NM, United States
 Lankford, Lance Harrell, Newcastle, CA, United States
 PA Ikon Corporation, Carson City, NV, United States (U.S. corporation)

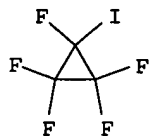
PI US---5674451 19971007
 AI 1995US-0401384 19950217 (8)
 RLI Continuation of Ser. No. 1993US-0027227, filed on 5 Mar 1993
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Anthony, Joseph D.
 LREP Dinsmore & Shohl LLP
 CLMN Number of Claims: 10
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 1089

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for sterilization of an article comprising contacting the article with a blend comprising an ethylene oxide sterilant and a propellant. The propellant comprises a fluoroiodocarbon of the general formula C.sub.a H.sub.b Br.sub.c Cl.sub.d F.sub.e I.sub.f N.sub.g O.sub.h, wherein a is between and including 1 and 8, b is between and including 0 and 2, c, d, g and h are each between and including 0 and 1, e is between and including 1 and 17, and f is between and including 1 and 2.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 22485-44-5, Iodopentafluorocyclopropane
 (fluoroiodocarbon blends as CFC and Halon replacements)
 RN 22485-44-5 USPATFULL
 CN Cyclopropane, pentafluoroiodo- (8CI, 9CI) (CA INDEX NAME)



L44 ANSWER 6 OF 9 USPATFULL on STN

AN 97:21660 USPATFULL
 TI Fluoroiodocarbon blends as CFC and halon replacements
 IN Nimitz, Jonathan S., Albuquerque, NM, United States
 Lankford, Lance H., Newcastle, CA, United States
 PA Ikon Corporation, Carson City, NV, United States (U.S. corporation)
 PI US---5611210 19970318
 AI 1993US-0027227 19930305 (8)
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Gibson, Sharon A.; Assistant Examiner: Anthony, Joseph D.
 LREP Dinsmore & Shohl LLP
 CLMN Number of Claims: 20
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 1184

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A new set of effective, environmentally safe, nonflammable, low-toxicity refrigerants, solvents, foam blowing agents, propellants, and firefighting agents is disclosed. The agents are clean, electrically nonconductive, and have short atmospheric lifetimes, zero ozone-depletion potential, and low global warming potentials. The agents comprise at least one fluoroiodocarbon agent satisfying the general formula C.sub.a H.sub.b Br.sub.c Cl.sub.d F.sub.e I.sub.f N.sub.g O.sub.h, wherein a is between and including 1 and 8; b is between and including 0 and 2; c, d, g, and h are each between and including 0 and 1; e is between and including 1 and 18; and f is between and including 1 and 2, either neat or mixed with additives selected from the group consisting of: alcohols, esters, ethers, fluoroethers, hydrocarbons,

hydrofluorocarbons, and perfluorocarbons.

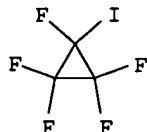
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 22485-44-5, Iodopentafluorocyclopropane

(fluoriodocarbon blends as CFC and Halon replacements)

RN 22485-44-5 USPATFULL

CN Cyclopropane, pentafluoriodo- (8CI, 9CI) (CA INDEX NAME)



L44 ANSWER 7 OF 9 USPATFULL on STN

AN 97:15810 USPATFULL

TI Fluoriodocarbon blends as CFC and halon replacements

IN Nimitz, Jonathan S., Albuquerque, NM, United States

Lankford, Lance H., Newcastle, CA, United States

PA Ikon Corporation, Carson City, NV, United States (U.S. corporation)

PI US---5605647 19970225

AI 1994US-0268583 19940630 (8)

RLI Division of Ser. No. 1993US-0027227, filed on 5 Mar 1993

DT Utility

FS Granted

EXNAM Primary Examiner: Gibson, Sharon; Assistant Examiner: Anthony, Joseph D.

LREP Dinsmore & Shohl LLP

CLMN Number of Claims: 34

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1256

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A new set of effective, environmentally safe, nonflammable, low-toxicity refrigerants, solvents, foam blowing agents, propellants, and firefighting agents is disclosed. The agents are clean, electrically nonconductive, and have short atmospheric lifetimes, zero ozone-depletion potential, and low global warming potentials. The agents comprise at least one fluoriodocarbon agent satisfying the general formula C.sub.a H.sub.b Br.sub.c Cl.sub.d F.sub.e I.sub.f N.sub.g O.sub.h, wherein a is between and including 1 and 8; b is between and including 0 and 2; c, d, g, and h are each between and including 0 and 1; e is between and including 1 and 18; and f is between and including 1 and 2, either neat or mixed with additives selected from the group consisting of: alcohols, esters, ethers, fluoroethers, hydrocarbons, hydrofluorocarbons, and perfluorocarbons.

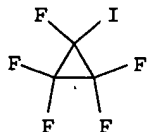
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 22485-44-5, Iodopentafluorocyclopropane

(fluoriodocarbon blends as CFC and Halon replacements)

RN 22485-44-5 USPATFULL

CN Cyclopropane, pentafluoriodo- (8CI, 9CI) (CA INDEX NAME)



L44 ANSWER 8 OF 9 USPATFULL on STN

AN 96:91783 USPATFULL

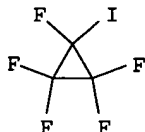
TI Fluoriodocarbon blends as CFC and halon replacements
 IN Nimitz, Jonathan S., Albuquerque, NM, United States
 Lankford, Lance H., Newcastle, CA, United States
 PA IKON Corporation, Carson City, NV, United States (U.S. corporation)
 PI US---5562861 19961008
 AI 1995US-0414566 19950331 (8)
 RLI Division of Ser. No. 1993US-0027227, filed on 5 Mar 1993
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Gibson, Sharon; Assistant Examiner: Anthony, Joseph D.
 LREP Dinsmore & Shohl
 CLMN Number of Claims: 16
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 1115

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A new set of effective, environmentally safe, nonflammable, low-toxicity
 refrigerants, solvents, foam blowing agents, propellants, and
 firefighting agents is disclosed. The agents are clean, electrically
 nonconductive, and have short atmospheric lifetimes, zero
 ozone-depletion potential, and low global warming potentials. The agents
 comprise at least one fluoriodocarbon agent satisfying the general
 formula C.sub.a H.sub.b Br.sub.c Cl.sub.d F.sub.e I.sub.f N.sub.g
 O.sub.h, wherein a is between and including 1 and 8; b is between and
 including 0 and 2; c, d, g, and h are each between and including 0 and
 1; e is between and including 1 and 18; and f is between and including 1
 and 2, either neat or mixed with additives selected from the group
 consisting of: alcohols, esters, ethers, fluoroethers, hydrocarbons,
 hydrofluorocarbons, and perfluorocarbons.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 22485-44-5, Iodopentafluorocyclopropane
 (fluoriodocarbon blends as CFC and Halon replacements)
 RN 22485-44-5 USPATFULL
 CN Cyclopropane, pentafluoriodo- (8CI, 9CI) (CA INDEX NAME)



L44 ANSWER 9 OF 9 USPATFULL on STN
 AN 95:76011 USPATFULL
 TI Fluoriodocarbon blends as CFC and halon replacements
 IN Nimitz, Jonathan S., Albuquerque, NM, United States
 Lankford, Lance H., Newcastle, CA, United States
 PA Ikon Corporation, Albuquerque, NM, United States (U.S. corporation)
 PI US---5444102 19950822
 AI 1994US-0269324 19940630 (8)
 RLI Division of Ser. No. 1993US-0027227, filed on 5 Mar 1993
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Wu, Shean; Assistant Examiner: Anthony, Joseph D.
 LREP Lowe, Price, LeBlanc & Becker
 CLMN Number of Claims: 11
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 1114

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A new set of effective, environmentally safe, nonflammable, low-toxicity
 refrigerants, solvents, foam blowing agents, propellants, and
 firefighting agents is disclosed. The agents are clean, electrically

nonconductive, and have short atmospheric lifetimes, zero ozone-depletion potential, and low global warming potentials. The agents comprise at least one fluoriodocarbon agent satisfying the general formula $C_{\text{sub.a}}H_{\text{sub.b}}Br_{\text{sub.c}}Cl_{\text{sub.d}}F_{\text{sub.e}}I_{\text{sub.f}}N_{\text{sub.g}}O_{\text{sub.h}}$, wherein a is between and including 1 and 8; b is between and including 0 and 2; c, d, g, and h are each between and including 0 and 1; e is between and including 1 and 18; and f is between and including 1 and 2, either neat or mixed with additives selected from the group consisting of: alcohols, esters, ethers, fluoroethers, hydrocarbons, hydrofluorocarbons, and perfluorocarbons.

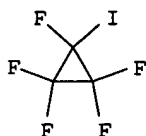
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 22485-44-5, Iodopentafluorocyclopropane

(fluoriodocarbon blends as CFC and Halon replacements)

RN 22485-44-5 USPATFULL

CN Cyclopropane, pentafluoriodo- (8CI, 9CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 13:25:09 ON 18 JUL 2006)

FILE 'REGISTRY' ENTERED AT 13:25:22 ON 18 JUL 2006

ACT QAZI282F0/A

L1 (471233)SEA FILE=REGISTRY ABB=ON PLU=ON C3/ESS

L2 STR

L3 2427 SEA FILE=REGISTRY SUB=L1 SSS FUL L2

L4 40 L3 AND 2/I

L5 1 C4H6I2 AND L4

FILE 'HCAPLUS' ENTERED AT 13:26:58 ON 18 JUL 2006

L6 1 L5

FILE 'REGISTRY' ENTERED AT 13:27:35 ON 18 JUL 2006

L7 1 CYCLOPROPANE/CN

L8 1402 1.13.1/RID AND L3

L9 1370 L8 NOT PMS/CI

L10 45 L9 AND I/ELS

SEL RN 1-3 6 6 13-15 30-36 41-45

L11 19 E1-19 AND L10

FILE 'HCAPLUS' ENTERED AT 13:38:19 ON 18 JUL 2006

L12 15 L11

FILE 'REGISTRY' ENTERED AT 13:39:50 ON 18 JUL 2006

L13 STR L2

L14 STR L13

L15 1 L14 SAM SUB=L3

L16 58 L14 FULL SUB=L3

SAV TEM L16 QAZ282F1/A

L17 STR L2

L18 16 L17 SAM SUB=L3

L19 0 L16 AND I/ELS

L20 396 L17 FULL SUB=L3

L21 6 L20 AND I/ELS

L22 SAV TEM L21 QAZ282F2/A
L23 STR L2
L24 26 L22 SAM SUB=L3
L25 643 L22 FULL SUB=L3
1 L24 AND I/ELS

FILE 'HCAPLUS' ENTERED AT 13:52:22 ON 18 JUL 2006

L26 4 L21
L27 19 L6,L12,L26
L28 1 US2004077502/PN OR (US2003-630282 OR US2002-401308#)/AP,PRN
E JACOBSON R/AU
L29 19 E3,E12
E JACOBSON RICH/AU
L30 47 E4,E9-10
E KELLY M/AU
L31 537 E3,E18-19
E KELLY MARTHA/AU
L32 30 E3-5
E JAMES W/AU
L33 32 E3
E JAMES WILLIAM/AU
L34 2 E3,22
L35 8523 (ROHM (L)HAAS)/CS,PA
L36 1 L27 AND L28-35
L37 18 L27 NOT L36
L38 17 L37 AND (PY<=2002 OR AY<=2002 OR PRY<=2002)
L39 18 L37-38

FILE 'HCAOLD' ENTERED AT 13:57:26 ON 18 JUL 2006

L40 1 L5,L11,L21
SEL AN
EDIT /AN /OREF

FILE 'HCAPLUS' ENTERED AT 13:58:08 ON 18 JUL 2006

L41 2 E1
L42 19 L39,L41

FILE 'HCAOLD' ENTERED AT 13:58:20 ON 18 JUL 2006

SEL HIT RN L40

FILE 'REGISTRY' ENTERED AT 13:58:33 ON 18 JUL 2006

L43 1 E2

FILE 'USPATFULL, USPAT2' ENTERED AT 13:59:08 ON 18 JUL 2006

L44 9 L40

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